

Redundant spaces and sustainable development in post-industrial weak market cities:
the cases of Kingston upon Hull and Sunderland

Ian Jones

Thesis submitted for the degree of Doctor of Philosophy
School of Geography, Politics and Sociology

Newcastle University

December 2022

Abstract

Industrialised cities have under used and unused land and property that can impact on the vitality and wellbeing of the city and its residents. The longer these assets remain unused, the more likely they are to become redundant. The larger the scale of the problem, the greater the negative impact it will have on adjacent neighbourhoods and the wider city. The prevailing development paradigms, with their focus on market based pro-growth strategies emphasising narrow forms of economic value, define 'redundancy' in ways which are problematic for weak market cities.

The objectives of the empirical analysis are to: outline the nature and extent of redundant spaces in Hull and Sunderland; understand what the drivers and constraints are to the reuse of redundant spaces in the case study cities; and provide an illustration of how the reuse of redundant spaces contributes to spatial equity through the provision of employment and housing opportunities, additional green space and improved accessibility.

This thesis examines whether the reuse of redundant spaces in post-industrial weak market cities, can contribute to improving spatial equity. It identifies different types of redundant spaces and examines how specific interventions impact on addressing spatial inequalities. It highlights that the reuse of redundant space can improve spatial equity; however, there are constraints that need to be overcome. As such, this thesis makes four main contributions: first, it provides a more comprehensive definition of redundant space by adding a temporal dimension; second, it provides a rich illustration of the variety of redundant spaces in two post-industrial cities. Thirdly, it demonstrates that redundant spaces are more geographically concentrated than other vacant sites, depending on their land use designation. Finally, it demonstrates the constraints to the reuse of such spaces, with an emphasis on land ownership and the planning system.

Acknowledgements

This project has been a journey of self-discovery. Having undertaken research to inform policy interventions over many years, I found an academic thesis to be another beast entirely. As a casual reader of academic works, I was always frustrated that there was a great deal of published material about the same subject. However, having begun to engage in an in-depth study of a specific issue my view has changed, and I began to understand that this was not about duplication but elucidation and refinement.

I must begin by thanking my wife, Susan, and son, Louis, who supported my initial idea of doing a PhD and continued this through the whole process – including sometimes listening to me rambling on about my research and escorting me to some of my case study sites. This was sometimes accompanied by questions about why I had not chosen more attractive places or something of interest to them.

I would like to thank my supervisory team of Andy Pike, Jane Gibbon and Richard Dawson for their support and guidance throughout my research. This interdisciplinary group brought different perspectives that helped shape this thesis. However, the research was supported by many other academic staff in Geography, Planning and the School of Engineering and I am grateful for their time and inputs.

However, this research would not have been possible without the generosity of time and encouragement given by the numerous stakeholders that engaged with this project. Their knowledge and insights about their cities, sites and policies that I engaged with, provided a rich resource and often shaped how my research developed. I am extremely grateful for the honest opinions and contextual information that they provided, which illuminated my understanding of both the case study cities and the redundant sites I was examining.

<i>Abstract</i>	<i>i</i>
Chapter 1. Introduction	8
1.1 <i>Approaches to the reuse of redundant space within weak market cities in England</i>	8
1.2 <i>Addressing spatial inequalities in weak market cities</i>	10
1.3 <i>Gaps in the literature</i>	11
1.4 <i>Aims and research questions</i>	12
1.5 <i>Thesis outline</i>	12
Chapter 2. The emergence of redundant space in post-industrial cities	15
2.1 <i>Post-industrial weak market cities</i>	15
2.2 <i>Sustainable development and its influence on the planning system</i>	22
2.3 <i>Planning and brownfield redevelopment</i>	27
2.4 <i>Limitations to the economic framing of value</i>	33
2.5 <i>Urban Regeneration</i>	35
2.6 <i>Gaps in the research literature relevant to this study</i>	38
2.7 <i>Aims and research questions</i>	39
Chapter 3. Methodology	40
3.1 <i>Introduction</i>	40
3.2 <i>Ontological and epistemological positioning and research design</i>	40
3.3 <i>Analytical framework</i>	41
3.4 <i>Methods of research</i>	48
3.5 <i>Conceptual framework</i>	48
3.6 <i>Data collection methods</i>	49
3.7 <i>Analysing the data</i>	56
3.8 <i>Ethics and positionality</i>	57
3.9 <i>Concluding remarks</i>	58
Chapter 4. Evolution of economic development, planning and regeneration policies in England	59
4.1 <i>Introduction</i>	59
4.2 <i>Post war developments</i>	60
4.3 <i>New urban entrepreneurialism</i>	63

4.4	<i>The New Labour era – neighbourhood renewal and the urban renaissance</i>	66
4.5	<i>The coalition governments approach to regeneration</i>	70
4.6	<i>Conclusions</i>	73
Chapter 5. Contextualising redundant spaces in Hull and Sunderland		74
5.1	<i>Introduction</i>	74
5.2	<i>The evolution of Hull and Sunderland</i>	74
5.3	<i>The performance of Hull and Sunderland</i>	80
5.4	<i>Spatial inequalities in Hull and Sunderland</i>	85
5.5	<i>Land use value in Hull</i>	87
5.6	<i>Land use value in Sunderland</i>	88
5.7	<i>Phases of regeneration in Hull and Sunderland</i>	89
5.8	<i>Spatial priorities for development and the location of redundant spaces in Sunderland and Hull, with an emphasis on case study sites.</i>	93
5.9	<i>Post-war period</i>	96
5.10	<i>New urban entrepreneurialism</i>	98
5.11	<i>The New Labour era – Neighbourhood renewal and the urban renaissance</i>	99
5.12	<i>The coalition government’s approach</i>	102
5.13	<i>Conclusion</i>	103
Chapter 6. The nature and extent of ‘redundant’ spaces in Hull and Sunderland		105
6.1	<i>Introduction</i>	105
6.2	<i>The extent of redundant spaces in Hull and Sunderland</i>	105
6.3	<i>Characteristics of areas with multiple redundant spaces</i>	110
6.4	<i>Types of land and property relating to the categorisation of types of redundant space in Hull and Sunderland.</i>	112
6.5	<i>The development models used in Hull and Sunderland and their underpinning concept of value.</i>	133
6.6	<i>Market failure in the reuse of redundant spaces in Hull and Sunderland</i>	134
6.7	<i>Approaches to market interventions in addressing redundant spaces in Hull and Sunderland</i>	136
6.8	<i>Conclusion</i>	145
Chapter 7. The drivers and constraints on the reuse of redundant spaces in Hull and Sunderland		147

7.1 Introduction.....	147
7.2 The response of local planning policies to the national policy framework in Hull and Sunderland	147
7.3 Causes and consequences of redundant spaces in Hull and Sunderland	148
7.4 Location of case study sites and their relationship with the wider distribution of redundant spaces	151
7.5 Land ownership and the implications for development, issues of private and public ownership..	184
7.6 Land values as a limiting factor to development	185
7.7 Conclusions.....	186
Chapter 8. The contributions of reused redundant spaces to spatial equity in Hull and Sunderland	188
8.1 Introduction.....	188
8.2 Contribution of case study sites to addressing spatial inequity	190
8.3 Additional amenities and facilities	190
8.4 Green Space/Infrastructure	196
8.5 Increased housing and offices	200
8.6 Increasing footfall and/or dwelling time	206
8.7 Air quality improvements.....	207
8.8 Conclusions.....	208
Chapter 9. Conclusions.....	210
9.1 Introduction.....	210
9.2 Summary of findings.....	211
9.3 Conceptual/theoretical contributions	220
9.4 Methodological contributions.....	221
9.5 Reflections on the study.....	223
9.6 Future areas for research.....	225

List of Figures

Figure 2-1 Pillars of Sustainable Development.....	26
Figure 2-2 Integrated Perspective on Sustainable Development.....	27
Figure 3-1 Real Estate Development Matrix	50
Figure 6-1 Lord Line site, St Andrew's Dock, Hull	118
Figure 6-2 Former shipyard, Sunderland.....	119
Figure 6-3 Former Northern Diver factory	120
Figure 6-4 Former factory unit, Sunderland	121
Figure 6-5 Former Vaux Brewery site, Sunderland.....	122
Figure 6-6 Former Ambulance Station, Hull	123
Figure 6-7 Former Police Station, Hull	125
Figure 6-8 Former Gill Bridge Police Station, Sunderland.....	126
Figure 6-9 National Picture Theatre, Hull.....	128
Figure 6-10 Former Synagogue, Sunderland	129
Figure 6-11 Initial phase of the Rainbow Garden, Hull	130
Figure 6-12 Great Thornton Street Flats	132
Figure 6-13 Farrington Row, Sunderland.....	133
Figure 6-14 Site of former Pennywell Estate, Sunderland	135
Figure 6-15 Case study sites in relation to the Real Estate Development Process	137
Figure 7-1 Location of redundant spaces in Hull in relation to deprivation	154
Figure 7-2 Location of redundant spaces in Sunderland in relation to deprivation	155
Figure 7-3 Location of case study sites in Hull.....	158
Figure 7-4 Location of case study sites in Sunderland.....	159
Figure 7-5 Case study sites in relation to the Real Estate Development Process	160
Figure 7-6 Location of Lord Line site, Hull	161
Figure 7-7 Lord Line site, Hull.....	163
Figure 7-8 Location of former paper mill, Sunderland	165
Figure 7-9 Former paper mill, Sunderland.....	166
Figure 7-10 Location of Fruit Market area, Hull.....	169
Figure 7-11 Location of former Vaux Brewery site, Sunderland	171
Figure 7-12 Former Vaux Brewery site, Sunderland.....	173
Figure 7-13 Location of Bonus Arena, Hull	176
Figure 7-14 Location of Northern Spire, Sunderland	179
Figure 7-15 Location of Rainbow Community Garden, Hull	182
Figure 7-16 Ariel view of Rainbow Garden, Hull	182
Figure 7-17 Location of MACQ, Sunderland.....	184
Figure 8-1 Framework for considering contribution to addressing disparities in spatial equity ..	193
Figure 8-2 'The Beam' on the Vaux site, Sunderland.....	203

List of Tables

Table 2-1 Impact of Brownfield Sites 28
Table 4-1 Periods of Urban Policy, 1945 - 2017 60
Table 5-5-1 Strategies and plans for Hull 90
Table 5-5-2 Strategies and plans for Sunderland 92

Chapter 1. Introduction

My motivation for this project arose from a long-term interest in economic development as a way of addressing spatial disparities, and the resulting urban landscape that follows from relative urban decline. Having studied issues in landscape planning as part of a Postgraduate Diploma and attempting to produce a landscape plan for a medium-sized post-industrial city, it became apparent that there were sites that were unused and had remained in this state for a long period of time. However, while it was not evident why these sites were not being reused, it was obvious that they have a negative impact on their surrounding neighbourhoods, influencing economic vitality, environmental conditions, social cohesion, and health and wellbeing. Contrasting this with more vibrant cities where the demand for development land is extremely high, I began to wonder why there were spaces in some cities that were left idle whilst negatively impacting on their surrounding neighbourhoods. This project is the result of further reflections on these issues and the factors that may have an influence.

This thesis will examine how the reuse of redundant spaces in post-industrial weak market cities can contribute to improvements in spatial equity. Redundant spaces can have negative economic, social and environmental impacts on the surrounding neighbourhoods, which can act as a constraint to businesses wishing to locate in the area or residents choosing to live there. This atmosphere of abandonment that may prevail in these neighbourhoods, can deter people from using these spaces for other purposes than those considered antisocial.

1.1 Approaches to the reuse of redundant space within weak market cities in England

In this thesis, I approach the reuse of redundant spaces from a pragmatic perspective, considering how unused land and property within a city can be utilised to address spatial inequities or inequalities. Cyclical and structural change in under-performing cities can leave them with 'post-industrial landscape scars' (Storm, 2016), in terms of vacant or derelict land and buildings, which if not addressed can lead to urban blight (Weaver and Bagchi-Sen, 2013), with potential impacts on surrounding areas. However, the speed at which these spaces can be addressed is often due to prevailing market conditions and the demand for land. Where 'weak market'

conditions (Power, Plöger and Winkler, 2006) exist, the duration before these are addressed can be substantial. The mechanisms for addressing them are bound up in the regeneration policies and the planning system, which in England is predicated on the idea of growth (Rydin, 2013). However, whether this is appropriate for weak market, declining or shrinking cities is questionable (Grossmann, 2004).

Inner city regeneration has been a focus for the planning system since the end of the Second World War, when the emphasis was on addressing bomb damaged areas. However, it subsequently evolved from a focus on physical development to encompassing the link between land use and economic and social priorities. There was a focus on addressing issues of deprivation from the mid-1960s onwards and the extent of unused land became a major political concern from the mid-1970s (Home, 1983). This led to a shift in the approach to addressing such spaces, towards focusing on the structural issues considered to be constraining development in the 1980s. During this period, the private sector was given a greater influence on development underpinned by public sector funding, and this led to spatial targeting of areas that could lever a profit on private investment.

A number of new institutions came to dominate the regeneration arena such as Urban Development Corporations, which reduced the influence of Local Authority's role in planning (Thomas and Imrie, 1997). This meant that some more problematic areas remained ignored, and this blight on the city became a focus of concern for the UK government. The new century heralded an urban renaissance shifting the focus to more sustainable forms of development, but with emphasis remaining on a private sector influence on development (Colomb, 2007). However, concurrently the regeneration landscape had become increasingly complex, with more organisations and funding streams having a role. The financial crisis of 2008 led to an abrupt cut in public finances, with regeneration and development budgets being the ones where the impact was greatest felt and led to the demise of regeneration bodies at a national, regional and local level (Gray and Barford, 2018). This also had a negative impact on Local Authority planning departments, with budget reductions leading to staff redundancies and the loss of capacity to undertake any functions other than development management (Goodchild and Hammond, 2013).

The reduction in public sector finances, therefore led to a greater reliance on private sector capital to fund the development in cities (Raco and Savini, 2019). For such investments to be made, the funders expect what they deem to be an acceptable financial return and require sites to be viable for development (Allmendinger and Haughton, 2010). Therefore, areas with weak market conditions and consequently a lower expectation of financial returns on investment in general and more difficult to develop sites, are less likely to attract interest from the private sector.

Local Authorities needed to find ways to overcome such market failures and identify mechanisms for removing both the physical and financial constraints to development. This sits within the wider context of reduced budgets and human resources. Although capital funding has become more affordable due to the low interest rates on offer, this can only be used to support capital budgets and no additional funding is available to support revenue budgets. Therefore, the capacity to plan strategically for the development of cities has increasingly been contracted out to private sector consultants as part of a capital project.

1.2 Addressing spatial inequalities in weak market cities

Spatial inequalities within cities can manifest themselves amongst groups of people or in specific geographical locations. To tackle spatial inequalities place-based interventions are required, but they need to be implemented in a sustainable fashion so as not to cause disruption in other parts of the city.

The concept of sustainability stems from concerns about environmental protection and was developed by the conservation and environmental movements in the 1960s and 1970s (Kidd, 1992), and was seen as an antithesis to rapid economic growth. But this understanding has evolved and broadened to ensure that it is not seen as anti-economic development (Portney, 2013). Such that now sustainability is an idea that embodies the concepts of economic stability, social equity and environmental quality (Herrmann *et al.*, 2016), and could be viewed as an organising principle governing activity at all levels of an urban system, as well as a process for selecting urban alternatives that will yield vitality, rather than a tangible goal with a definite societal end point (Basiago, 1999).

(Daly and Farley, 2011) argue that sustainable development offers an attractive, perhaps the only, alternative to conventional growth-oriented development thinking. This resonates with Grossmann (2004) who considers a focus on growth to be inappropriate in some circumstances. A major weakness of the concept is its malleability, and different interpretations have been adopted by various actors, institutions or perspectives.

1.3 Gaps in the literature

The literature review presented in Chapter 2 provides an examination and critique of the main theoretical and empirical approaches to understanding post-industrial weak market cities, development models used and its associated conceptualisation.

Research on third tier post-industrial cities in the UK is limited (Martin *et al.*, 2016a; Pike *et al.*, 2016), and where it does exist there is a major gap in understanding land use challenges, particularly with respect to redundant spaces. Also, how the 'weak market' nature of some of these cities can lead to a lack of utilisation of such spaces is an obvious omission.

There is a significant literature on the reuse of vacant and derelict land and buildings as a contributor to economic growth (Freire Trigo, 2020) Goldstein, Jensen and Reiskin, 2001), but only limited reference is made on the contribution that the reuse of these spaces can make to addressing spatial equity issues (Currie and Sorensen, 2018) which can be exacerbated the longer these spaces remain unused.

The literature addressing place-based policies has had little to say about the ways in which these can influence geographical inequalities within a city. People-based policies are considered to have this function, but the interaction between these means that they both can make a contribution.

Collectively, all of the vacant spaces that remain unused could be considered as 'redundant' landscapes (Nel *et al.*, 2003), but to date they have not been conceptualised as such and the variety and commonalities between these spaces have not been considered. This will form a central theme within this research as the response to addressing these are intimately linked to the causes and consequences of their existence.

1.4 Aims and research questions

The aim of this thesis is to examine whether the reuse of redundant spaces in post-industrial weak market cities, can contribute to addressing issues associated with spatial equity. The empirical chapters are structured around the research questions set out below:

1. How can 'redundant' spaces be conceptualised and their relationship with spatial equity be considered?
2. What is the nature and extent of redundant spaces in post-industrial weak market cities?
3. What are the causes of redundant spaces and what factors are constraining their reuse?
4. In what ways are the reuses of redundant spaces attempting to address spatial inequality?

1.5 Thesis outline

Chapter 2 gathers together a range of hitherto unconnected literatures, to elucidate how redundant spaces in post-industrial weak market cities have emerged. In doing so, it identifies a number of gaps that the thesis attempts to begin to address. First and foremost, the idea of redundant space is under conceptualised, and no consideration is given to the variety of such spaces. Although there is a literature on weak market cities, this tends to focus on larger cities and concern itself with economic performance only. There is a substantial literature on sustainable development, but the emphasis is either on the environment or the 'development' aspect in economic terms; however, issues around spatial equity are only superficially covered.

Chapter 3 addresses the methodological approach used for this research. The case study cities were selected using the variation finding strategy to facilitate comparisons across the experiences of relatively similar cities (Robinson, 2011). In order to elicit meaningful information from the various sites, a more relational comparative approach has been used, as this recognises the history and geography behind the production and reproduction of cities (Ward, 2009; Cook and Ward, 2013) and the spaces within them. This enables information gained from the detailed

examination of one site to inform the investigation of other sites, furnishing a more sophisticated conceptualisation of the relational understanding of these spaces (Ward, 2009; McCann and Ward, 2012) within the wider context.

This study will use an intensive research design in order for the processes behind the evolution of a small number of redundant sites to be explored (Sayer and Morgan, 1985). A comparative framework will consider four sites in each of the two cities used to contextualise the weak market characteristics that exist. An information orientated selection is employed to determine the case study sites, as this will allow the deeper causes behind their current status using a variation finding strategy to be explored (Flyvbjerg, 2006; Robinson, 2011). The cities were selected on the basis that they were third-tier cities, with postindustrial and weak market characteristics (Power, Plöger and Winkler, 2006; Power, 2010). The individual sites themselves were identified through a combination of a basic townscape analysis and their stage on a real estate development matrix (Kohlhepp, 2012; Landscape Institute, 2018). They were identified from various Local Authority strategies and plans, as well as stakeholder interviews. A mixed methods approach has been adopted as the multi-layered nature of the cases means that both quantitative and qualitative data are required (Bryman, 2012). Both primary and secondary data is utilised and then brought together into a Site Review, with each site review exploring their pathways to redundancy within their spatial and historical contexts.

Chapter 4 provides an overview of the evolution of regeneration and planning policy (Tallon, 2013) as it relates to previously developed land at a national and local level, to develop an understanding of how redundant spaces may be considered. It does this by considering different discrete periods and considers the policies and their associated funding stream as well as the main actors involved in the process. It then highlights the growing dominance of the private sector in regeneration (Meyer and Lyons, 2000; (McGreal *et al.*, 2000).

Chapter 5 considers the relative performance of the two case study cities (Martin *et al.*, 2016b; Pike *et al.*, 2016). It then goes on to consider the tools provided by the changing nature of regeneration policies that help to address redundant spaces in their cities. An emphasis here is given to the institutions involved and the prominence of Local Authorities in each phase.

The main focus of the empirical research has been to develop a clearer understanding of redundant spaces. Chapter 6 examines the nature of redundant spaces in Hull and Sunderland, drawing on the framework constructed from a basic Townscape Analysis (Landscape Institute, 2018). It considers the nature of the interventions necessary to overcome market failure in the reuse of these spaces. It recognises the development model used in each city and how the conceptualisation of value may limit the types of projects taken forward. Also, an assessment of the weaknesses of previous policy approaches to tackling these spaces are outlined.

Chapter 7 examines the spatial distribution and extent of redundant spaces across Hull and Sunderland and looks at the causes and consequences of these. This is developed further through consideration of the evolution of 8 case study sites, and the implications of land value and ownership for their pathway to redundancy. Another important consideration is the extent to which these sites are related to priority development areas within each city, and the consequences for those that fall outside of them.

Chapter 8 examines the contribution that these case study sites make to improving spatial equity in each of the cities, highlighting the issues of accessibility and the limitations this poses for addressing spatial inequalities.

Finally, Chapter 9 presents the study conclusions and outlines areas for further research. It also draws out some of the implications for the policies adopted in cities, if they are to address issues of redundant spaces.

This study provides a definition of redundant spaces that embraces their temporal dimension and variety, to give a richer conceptualisation of this phenomenon. The methodology used, involves an innovative approach to case study data collection and analysis in the form of Site Reviews. These provide a tool that could be used by others in their research. It also draws out how the reuse of redundant spaces can contribute to addressing deficits in spatial equity in both cities.

Chapter 2. The emergence of redundant space in post-industrial cities

This chapter aims to provide the academic framing for the thesis, by engaging with five broad themes which draw on key literatures in order to set out the foundations underpinning the aims and objectives of this study. It does this, to develop a framework to analyse the reuse of redundant spaces within UK weak market cities, and determine how this can contribute to addressing problems of spatial inequity across these cities.

It considers the prescription of under-performing cities as a way of justifying the context of weak market cities, which struggle to attract private sector investments, and the public sector must therefore take on a more significant role. It incorporates an understanding of the uneven spatial impact of deindustrialisation and how this can lead to pockets of deprivation and areas with vacant or derelict land and property. Sustainable development is considered in terms of how it relates to spatial inequality and the planning system. It then proceeds to examine the drivers and constraints to brownfield redevelopment. Because this is constrained by the value of the resulting development, the limitations of the economic framing of this concept are discussed. Finally, consideration is given to urban regeneration, in terms of its purpose and the policies used to transform the configuration of spaces and the funding mechanisms used to underpin these. The gaps and links into the literature identified, then shape this study's aims and research questions.

2.1 Post-industrial weak market cities

When considering underperforming cities, they can either be growing at a slower rate than other cities or declining relative to others. Scholars have argued that this phenomenon can be observed on every continent, and can be considered as a 'significant international politico-economic and planning issue' (Martinez-Fernandez *et al.*, 2012, p. 214). (Oatley, 1998) considers the performance of a city to depend on the competitiveness of its economic base in terms of commerce, industry and institutions. However, these are all internal to the city and could imply that it is responsible for its own performance. However, a city's performance is a relative concept (Pike *et al.*, 2016) and so it is necessary to compare the city of concern to other cities or the national average. According to Sunley, Martin and Tyler (2017),

there is growing evidence that some cities benefit from the processes of globalisation and deindustrialisation, whilst others have difficulty in adapting to the new circumstances. Moretti (2012) attributes the emphasis on deindustrialisation for the divergence in city performance, as being contingent on whether they have focused on knowledge-based industries or more routine production sectors. These differing industrial structures impact upon wages and thus living standards in different cities. Others place the emphasis of uneven growth on the concentration of human capital within a city (Berry and Glaeser, 2005) or specialisation and productivity within specific sectors (Storper, 2013).

Within the UK, the last three decades or so of city growth has been unequal and divergent, with the former industrial areas of northern Britain lagging behind those in the south (Martin *et al.*, 2016a). The weaker performance of these former industrial areas has attracted the attention of government over many years; however, the emphasis has primarily been on areas demonstrating economic decline rather than those with slower growth. The study of urban decline has a long history, but a greater focus was given to this within the literature from the 1970s, when the post-war model of stability began to unravel and the impact of the forces of globalisation began to take a grip (Pallagst, 2015). The incidence of this is quite widespread, as illustrated by the finding that almost 42% of European cities were declining, with Eastern European cities being most greatly affected (Turok and Mykhnenko, 2007). Within the US, city decline has been widespread since the end of World War II (Beauregard, 2007; Beauregard, 2009). However, declining cities are not limited to these continents and (Audirac, 2007) has claimed that declining cities are now a global phenomenon, or at least a widespread first world occurrence (Hollander *et al.*, 2009). Despite this, many politicians and planners view declining cities as an exception, temporary and localised (Wiechmann and Wolff, 2013).

To move beyond the direct relationship between the idea of city decline and external factors impacting on the city, as highlighted by (Martinez-Fernandez *et al.*, 2012) other concepts have been used in attempts to highlight the complexity of the change. The two worth noting are shrinking cities and weak market cities.

A 'shrinking city' can be defined as an urban area — a city, part of a city, an entire metropolitan area or a town — that has experienced population loss, economic

downturn, employment decline, and social problems as symptoms of a structural crisis (Martinez-Fernandez *et al.*, 2012). However, this fails to consider the absolute and relative decline distinctions (Pike *et al.*, 2016), which are vital for understanding the performance of cities. Power (2010a, p. 1) states that '[w]eak market cities are cities that have experienced acute loss of purpose over the last generation, going from urban industrial giants to shadows of their former glory and pre-eminence' (Power, 2010a, p. 1). The characteristics of these cities greatly influence their ability to change their fortunes.

Although structural change and its impacts are similar, their starting points differ, with weak market cities having an initial prominence in some aspect of their economic structure, where this has not necessarily been the case for shrinking cities. Both tend to experience a high level of economic distress (Furdell and Wolman, 2006) due to their traditional focus on manufacturing industries, which have suffered catastrophic loss of businesses and related jobs (Schwarz, 2013), and may also be characterised by slow economic growth or even retraction in many cases (Furdell and Wolman, 2006). This can lead to higher levels of residential economic distress, evidenced through elevated levels of unemployment and lower earnings, which can result in lower levels of labour force participation and increased welfare dependency. This reduced economic activity can result in the physical decline or decay of the urban environment (Plöger, 2013).

Suburbanisation can be both a cause and effect of decline, with people leaving the urban core to live on the outskirts of the city. This is due both to the diminished number of jobs along with physical and social deterioration of the city centre, because of instituted behaviours such as place loyalty and attitudes to long distance commuting.

Although the causes of decline are diverse, they reveal a close relationship between demographic and economic processes which have had an impact on settlement structures, land use patterns, and population composition of the particular cities (Rink *et al.*, 2010). The dynamics of these determining factors are influenced by other intervening factors, such as the political system and its changes on different spatial levels (national, regional, urban, and local), the shape of regeneration policies, the physical structure of the city, cultural factors, etc. Therefore, a declining

city is context specific, and additionally the nature and scale of the impact can be influenced by the size of the city, with smaller cities suffering more than the larger ones (Turok and Mykhnenko, 2007).

Individual declining cities are often considered in isolation, rather than within the wider context in which they operate (Weaver and Holtkamp, 2015), and processes taking place outside of the cities are only weakly integrated in the current analyses (Bernt, 2016). This is despite UrbanAudit (2007) highlighting the importance of the regional context in Great Britain .

To consider the processes that lead to decline, it is necessary to identify an initial driver. This is an arbitrary decision given the inter-relationship between the causes identified above. Because of my focus on post-industrial cities, it seems appropriate to take de-industrialisation as this initial driver of change within the city, especially given its relationship with the creation of redundant sites, which is consistent with the view expressed by Plöger (2012). This process, which alters the employment structure of the city, can induce a general economic crisis, unemployment and outmigration, particularly amongst the young and more highly skilled, to more prosperous areas where employment opportunities are better (Haase *et al.*, 2012b). Much of the initial research on deindustrialisation approached it as a purely economic phenomenon, and tended to focus on plant closures and the immediate impact on workers (Massey and Meegan, 2014). The main focus was very much on the number of job losses, the impact this had on unemployment rates and the changing structure of employment within the economy, along with the spatial distribution of these impacts (Strangleman and Rhodes, 2014). (Cowie, Heathcott and Bluestone, 2003, p. 5) consider this as the 'body count' of the process. However, (Bluestone, Bluestone and Harrison, 1982) went beyond an economic focus and relatively short time horizons, to consider broader societal, political and cultural impacts.

Britain's deindustrialisation was accompanied by suburbanisation and led to the abandonment of residential housing in the inner city, social deterioration and decay of the affected neighbourhoods (Haase *et al.*, 2013; Rybczynski and Linneman, 1999). The process of suburbanisation, following industrial decline, has been more prevalent in the US, where many cities have suffered from the 'doughnut effect',

where city centres become ‘hollows’, consisting of unused sites, whilst suburbs grow (Haase *et al.*, 2012b; Mallach, 2012; Beauregard, 2012). It is important to note that when populations decline in urban centres, so does the demand for residential, commercial and industrial property, which has implications for city finances. In extreme cases, it can cause demand to completely collapse, leading to reductions in land prices and abandonment, leaving derelict or contaminated space that is difficult to repurpose without major investment (Hackworth, 2014).

The policy response to such changes can have major implications for land use. The absence of investment in declining urban centres, as well as public policies tending to support suburban growth, can contribute to heightening urban decline (Fol and Cunningham-Sabot, 2010). Also, it is important to note that the processes of decline are never exactly the same in two places (Bontje and Musterd, 2012) and the resulting configurations are a justification for place-based policies and tailored solutions (Neumark and Simpson, 2015). This is influenced by the mix of institutions and is context specific (Weaver and Holtkamp, 2015; Bernt, 2016) and by simply considering generalised causes, consequential information about the cities’ functional, spatial, and morphological contexts can be overlooked (Jessen, 2012).

Despite the complexity of these processes, they are often traded for an easily accessible variable, population change, which allows for the convenient construction of typologies (Bernt, 2016). This criticism has been countered by Turok and Mykhnenko (2007) who contend that this change is a consequence of the differentiated development of cities, and a major factor determining economic conditions. However, part of the reason that decline occurs is due to the local area’s inability to adjust to changing external conditions (Reckien and Martinez-Fernandez, 2011; Weaver and Holtkamp, 2015), which suggests limitations in institutional capacity.

The impact of decline leads to several expected losses, including the loss of services, spending power, tax and other municipal sources of income, labour force, and investments (Bontje and Musterd, 2012). Declining cities can also suffer from diminished capacity in the areas of finance and governance, leading to an increased dependence on external resources, alongside a reduction in municipal budgets which can limit the ability to address the maintenance of infrastructure and

development issues within the area (Haase *et al.*, 2012a; Plöger, 2012; Shetty, 2009).

A declining population does not always lead to vacant residential properties or neighbourhoods (Bernt, 2016). Different housing cultures, planning systems, supply structures and other factors, mean that population losses have a very differentiated impact on occupancy rates (Bernt, 2016). In addition, it is important to note that there may be a lag between the initial processes of decline and the land use implications (Haase *et al.*, 2012b). According to Schlappa and Neill (2013), one of the most visible effects of decline due to de-industrialisation is the existence of underused or derelict buildings and large tracts of brownfield sites, often close to the city centre. These have a negative impact on the area and create a discontinuous, or perforated urban fabric and fragmented infrastructure networks, which are more expensive to service (Rybczynski and Linneman, 1999; Haase *et al.*, 2012b; Koziol, 2004; Cunningham-Sabot *et al.*, 2013).

The deterioration of the urban fabric and the lack of public investment create 'terrains vague' (Mariani and Barron, 2014; Sola-Morales Rubio, 1995), which affects the image of the city and has a discouraging effect on the possible establishment of new industries (Fol, 2012). It should be noted that vacant buildings and derelict land need not always be negative, as they can provide space for new development opportunities (Strauß, 2016).

The migration and suburbanisation of some elements of the population and associated stagnant or declining property values (Mallach, 2012) and relative unattractiveness of some areas, has led to in-migration of lower skilled workers and the 'studentification' in some neighbourhoods (Cunningham-Sabot *et al.*, 2013). The outcome of all of this, can lead to socio-spatial segregation within these cities (Fol, 2012).

Abandonment and limited maintenance of land and buildings leading to physical decay, can also lead to environmental issues (Plöger, 2012), with implications for the health of those living in close proximity to these sites (Bambra *et al.*, 2014). Illegal dumping is more likely in sparsely populated parts of cities or where there is

redundant land and property (Hollander *et al.*, 2009), which can further exacerbate these issues.

Because of the lack of population decline at a national level, and the characteristics of the cities, the manifestations of decline in some places are not a high profile issue (Cunningham-Sabot and Fol, 2009). There is also a stigma levelled at cities that are growing slowly or declining (Reckien and Martinez-Fernandez, 2011), and because of this, in most cases the administrative system in declining cities persist with policies that are solely growth orientated (Wiechmann and Wolff, 2013).

The focus of research on city decline or shrinkage in Great Britain has been on the larger metropolitan areas, the Core Cities. This is partly due to the view that it is the major urban areas rather than the smaller towns and cities that have experienced decline (Cunningham-Sabot and Fol, 2009; Cunningham-Sabot and Roth, 2013). While this is not the case, little attention has been given to third-tier cities, with the exception of research by Pike *et al.* (2016) and Martin *et al.* (2016b) – and even then limited consideration is given to the process of decline and the land use implications.

Blight and landscape scars that remain due to industrial decline, can have a profound impact on the neighbourhoods and the city as a whole (Storm, 2016; Weaver and Bagchi-Sen, 2013; Goldstein and Reiskin, 2001). Although the explanations for deindustrialisation differ, the outcomes are very similar, and a declining share of manufacturing in terms of both employment and output, result in an increase in the share of services. However, the geographical distribution of services has been uneven across Britain, bringing about a reworking of spatially uneven development (Marshall and Jaeger, 1990). The locations of services tend to be closely linked to levels of consumer expenditure, and producer services tend to be concentrated in London and the southern regions (Marshall, 2007), i.e., where demand for their services is strongest and where there is an appropriately skilled workforce (Coffey, 2013). Thus, the locational dynamics of the service sector differs from that of industry (Winther, 2007), and can result in a spatial mismatch within an area.

These various transformative phases of development have led to spatial disparities, and even to the redistribution of capital resulting in uneven distribution of economic

assets (Wolff and Wiechmann, 2017). The process of deindustrialisation is often associated with the 1970s and the 1980s in the UK and USA, but it has continued beyond these decades and has extended its geographical reach following the 2008 global financial crisis. Indeed, it can be argued that it is not place or time specific, nor is it limited to the spatial impacts of manufacturing decline (Cowie, Heathcott and Bluestone, 2003). Rather, it should be considered as a complex process that is uneven in its causes, timing and impacts.

Underperforming cities can lose their status relative to others, making them less attractive to private sector investors. The loss of employment opportunities and population can lead to the abandonment of various sites and neighbourhoods within the city, the nature of these being context specific. The public sector is primarily tasked with addressing these perforations in the urban fabric, with central government funding a range of public bodies, as city finances are reduced due to the loss of businesses and individuals previously located there – and the difficulty in attracting new employment opportunities and residents. The longer these areas remain unused the more likely they are to become redundant, with negative impacts on the image of the city and the wellbeing of businesses and residents. The economic, social and environmental consequences of these need to be addressed, but it has been argued that focusing on economic growth may not be the most appropriate response within weak market cities, as this can lead to further spatial disparities. A more appropriate objective therefore could be to pursue sustainable development (Grossmann, 2004), in order to alleviate the existence of spatial inequity within areas of the city.

2.2 Sustainable development and its influence on the planning system

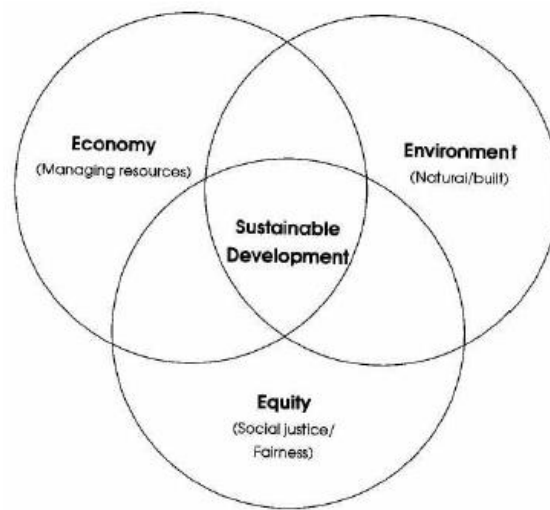
Sustainable development as a concept came to prominence in the late 1980s with the publication of 'Our Common Future' (WCED, 1987). Also known as the Brundtland Report, it sets out a broad and widely cited definition which views economic development as activities that 'meets the needs of the present without compromising the ability of future generations to meet their own needs' and is a process leading to sustainable outcomes (Lozano, 2008). It is considered by (Quental, Lourenço and da Silva, 2011, p. 16) to be 'an intellectual answer to reconciling the conflicting goals between environmental protection and economic

growth'. This is not an uncontested definition, however, as in the annex of 'Blueprint for a Green Economy' (Pearce, Markandya and Barbier, 2006), a further 23 definitions are cited. The main difference between them is the extent to which the environment is privileged over economic growth, due to the normative nature of sustainability and the different disciplinary backgrounds of those adopting the concept. These relate to the 'strong' and 'weak' conceptualisations of sustainability, where strong conceptualisations view man-made capital and natural capital as complementary and weak ones see them as substitutes (Connelly, 2007; Dobson, 1996).

The definitions of sustainable development identified by (Pearce, Markandya and Barbier, 2006) can be subdivided into five categories: the conventional economists' perspective; non-environmental degradation perspective; integrated perspective; intergenerational perspective; and holistic perspective (Lozano, 2008). Economists view sustainability as nothing more than one element of a desirable development path (Stavins, Wagner and Wagner, 2003) and often confuse sustainability with economic viability and ignores intergenerational equity (Lozano, 2008). Within the non-environmental degradation perspective, the main argument is that resources are scarce, consumption cannot continue indefinitely, natural resources should be used so as not to overshoot their carrying capacity, and environmental capital should not be depleted (Daly, 2006; Costanza, 1992). Although, situated within a more environmental perspective, it has been argued that this viewpoint ignores the social aspects of a more rounded consideration of sustainable development (Lozano, 2008). Within an integrated perspective, the key characteristic is that economic, environmental and social aspects are brought together, but this has been criticised for focusing on current activities, whilst the inter-generational perspective factors in temporal aspects (Padilla, 2002; Stavins, Wagner and Wagner, 2003). Finally, the holistic perspective combines the integrated and inter-generational perspectives.

Sustainable development can be graphically represented in numerous ways, but the most common is as a Venn diagram. This represents the three pillars of sustainable development: Economy, Society (Equity) and the Environment, with sustainable development at the centre.

Figure 2-1 Pillars of Sustainable Development



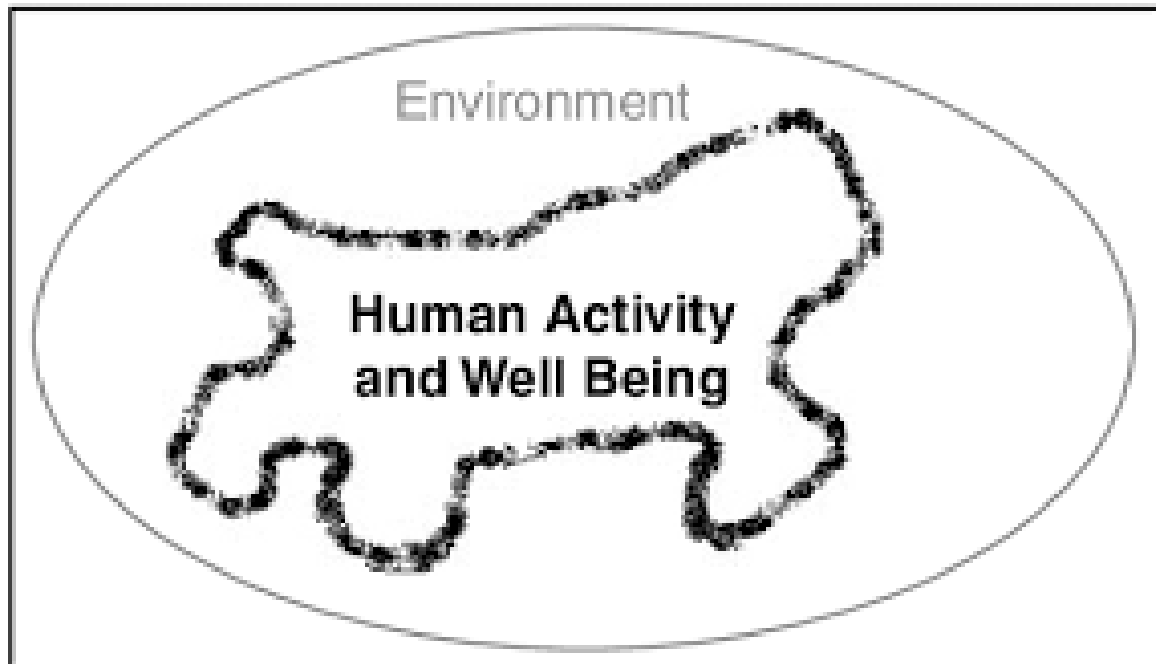
Source: (Salite and Pipere, 2006)

This representation aims to conceptualise the relationship between economy, society and environment, and attempts to demonstrate that they are balanced and that conflicts can be reconciled. The danger of representing them as separate domains is that different perspectives may place greater priority on a particular domain, which as illustrated in the different conceptualisations of sustainable development is often the case. A major weakness of this approach is that it allows for the compartmentalisation of economy, society and environment (Giddings *et al.*, 2002) and because of the prevailing political reality, prioritises the economy. Thus, supporting the weak sustainability position that the economy and environment domains are substitutes (Gibbs, Longhurst and Braithwaite, 1998). However, the Brundtland report (WCED, 1987) aimed to focus on human needs and the environment as the outcomes of sustainable development.

It has been claimed that it is better to remove the separation of the economy as this privileges the role of the market, makes it seem autonomous and unrelated to meeting human needs (Giddings, Hopwood and O'brien, 2002). Bringing the economy and society together enables human activity and wellbeing to be considered. Therefore, human activity and wellbeing should be viewed as

interconnected and within the environment; however, the boundary between them is fuzzy and allows for the flows of material and energy (as illustrated in figure 2.2).

Figure 2-2 Integrated Perspective on Sustainable Development



Source:(Giddings, Hopwood and O'brien, 2002)

The WCED definition implies the need for inter-generational and intra-generational equity as underpinning principles of sustainable development (Haughton, 1999; Haughton and Hunter, 1994). Inter-generational equity relates to the long term horizon of sustainable development, and intra-generational equity correlates with the quality of life of current generations (Waas *et al.*, 2011). Although the World Commission on Economic Development (WCED, 1987) considered sustainable development to be a global issue, it continues to state that 'at a spatial level, development shall be considered to be sustainable if it allows one to meet the needs of the population of a territory without compromising the ability of the inhabitants of other territories to meet their own needs' (WCED, 1987). Therefore, consideration should be given to spatial equity (Buhangin, 2013; Zuideau, 2006) and this can be viewed as the pursuit of a reduction in spatial inequalities (Stohr and Todtling, 1979).

Sustainable development and planning

Since the early 1990s, the concept of sustainable development has been used by planners, with considerable debate about how to incorporate this into development plans (Counsell, 2007). It has been proposed that this concept has revived the forgotten idea that planning can be both large scale and visionary (Berke, 2016). The discourses of sustainability can be categorised into two major groups. One draws on ecological modernisation and the other on risk society theory (Davoudi, 2010). The risk society is considered to represent a new phase in the process of modernisation, which views the production of wealth as being systematically accompanied by the social production of risks (Beck, 1992). It suggests that there is a conflict between contemporary modes of production and ecological needs.

Within the more moderate conceptualisation of ecological modernisation, environmental degradation is not seen as an anomaly of modernity, as it relies on the utilisation of science and technology to achieve better environmental performance (Davoudi, 2010; Fudge and Rowe, 2001). Here, the concept of sustainability is marketised and so better left to market forces to achieve the best outcomes. Within the process of policy making, the reliance is on an elitist, technocorporatist approach to decision making (Hajer, 1992). Accordingly, the state assumes an enabling role, facilitating the operation of the market within a regulatory framework. (Blowers, 1997) has argued that it represents a pragmatic and seemingly rational and realistic approach, which provides a fairly clear direction. The UK government's conceptualisation of planning and the one adopted in practice, fits neatly into the ecological modernisation approach, as the risk society approach suggests less intervention (Davoudi, 2010). This has a clear link to sustainability as ecological modernisation and is considered to be the perspective driving the WCED 'Our Common Future' report (Stø *et al.*, 2005; Revell, 2005).

Following the publication of the UK's Sustainable Development Strategy (HMGovernment, 1994), local authorities were encouraged to take sustainability more seriously (Blowers and Young, 2000); and this became embedded in the planning system following the publication of 'Planning Policy Statement 1: Delivering Sustainable Development' (ODPM, 2005). The Statement reinforced that sustainable development is the core principle underpinning planning, and that local authorities should be delivering this through their Local Plans. However, it has been claimed

that the 'planning system is failing to deliver to its potential, and has in fact abandoned many vital sustainable development outcomes and the wider endeavour of place-making in favour of an overwhelming focus on the allocation of housing units' (TCPA, 2016).

The discourse of ecological modernisation provides a framework for national and local state intervention to address issues of land use within their territory, in order to bring about physical change. In weak market cities, the landscape scars left by the processes of deindustrialisation provide both impediments and opportunities for development.

2.3 Planning and brownfield redevelopment

The growing prominence of sustainable development within UK policy is closely linked with a focus on brownfield regeneration (Dixon and Adams, 2008). The term 'brownfield' has two derivations in the UK, but neither of these have precise definitions (Raynesford, 1998). The first derivation is simply that it is the opposite of greenfield in planning terms (Alker *et al.*, 2000). However, it is generally understood that 'a brownfield site is any land or premises which has previously been used or developed and is not currently fully in use, although it may be partially occupied or utilised. It may also be vacant, derelict or contaminated' (Alker *et al.*, 2000, p. 64). These spaces are often associated with depressed inner city, areas that were once heavily industrialised (Davis, 2002, p. 5). However, in the UK the term encompasses a broader range of land and property including former schools or health centres; offices and retail units; community facilities; along with other commercial and civic buildings. Despite this variety, there is a concern that they are considered in a similar way. These sites may be in this state due to 'frictional vacancy', which arises from normal development processes, 'demand-deficient vacancy' arising from cyclical changes in the levels of demand for land within the area, and 'structural vacancy', defined as land rendered permanently surplus to requirements by changes in technology or in the nature of demand (Couch and Fowles, 1992).

On the other hand, these spaces offer the potential for new development opportunities, which can aid the development of the city and are considered by some to be essential for regeneration (CPRE, 2014). They can also have several negative impacts, affecting the aesthetics of an area making it less attractive to investors,

damaging the health and wellbeing of residents and causing environmental damage. Table 2.1 shows the positive and negative impacts of the existence of brownfield sites.

Table 2-1 Impact of Brownfield Sites

Positive	Negative
Opportunities for new developments, especially housing but also mixed-use developments, employment and education facilities	Impacts on neighbourhood housing values
Restoration of environmental quality	Stigma related to area conditions (real or perceived)
Removal of physical hazards and objects	Site clearance and clean-up costs, especially where site has abnormalities
Reduction in antisocial behaviour on the site	Attract lower income households to surrounding houses
Potential for the creation of greenspace	Perceived poor neighbourhood quality due to 'contagion effects'
Improvements to the aesthetics of an area	Impact on health and wellbeing, leading to higher morbidity and mortality rates in surrounding areas
Prevention of urban sprawl	Limited financial return on development
Relieves development pressures on the countryside	Complex ownership structures
Improved air quality and reduction of greenhouse gas emissions	Planning constraints

Source: (Gilderbloom, Meares and Riggs, 2014; Burrows, 2014; Williams, 2012; Bamba *et al.*, 2015; Dixon, 2007)

The type of development potential that these spaces possess, impacts on the value they are assigned (Bowman and Pagano, 2004) and the interest that investors and developers will have in the site. Some cities have given over sites to community groups, who have turned them into community gardens (Tranel and Handlin, 2016), adding to the green space in cities. In cities such as Detroit, larger areas of previously developed land have been adapted for urban agriculture, thus changing the environmental and economic aspects of urban social relations (Walker, 2015). However, there are no areas in the UK that have developed greenspace on this scale.

Despite the potential of previously developed land for improving the environment, quality of life and the economy, a number of factors constrain their reuse. These include the viability of the development and the constraints of the planning system, and issues of land ownership.

Viability is a multidimensional concept and can be seen from two perspectives: those of the developer and the landowner. For the developer, it is about the return on their investment in terms of profit, usually calculated using the residual valuation method (Jones, Leishman and MacDonald, 2009). It also must be remembered that different locations carry perceived levels of development risk, and so require different rates of return. These risks can be exacerbated if the development time frame is long and subject to fluctuating costs, given that land is often paid for at the outset of a project (Jones, Leishman and MacDonald, 2009). A major constraint to a project being viable is the cost of the land itself.

The difficulties associated with site assembly are a major constraint to brownfield site reuse (Burrows, 2014). This stems from the complex land ownership structures that exist (Adams *et al.*, 2010; Adams *et al.*, 2016) identifies five main categories of constraints to the development of a particular site. The most obvious of these is the difficulty in identifying the owner of a particular site, either because it has been unused for a long period of time or because ownership is in dispute. Ownership rights may be divided because of the existence of various licences, covenants, outstanding mortgages or other charges. The privileging of property rights in UK law and politics can enable property owners to legally exclude others from using their assets (DFID, 2014) which can be a constraint to economic growth or human

welfare. The existence of multiple owners can add to the opaqueness of ownership (Christophers, 2018) and potential ransom strips can be major constraints. The owner and potential purchaser may not be able to agree terms that are acceptable to both parties. Of course, it could be the case that the current owner does not wish to sell. However, despite these issues private ownership of a brownfield site is preferred to public ownership (Meyer and Lyons, 2000). (Longo and Campbell, 2017) identified that a site being privately owned increases the likelihood of redevelopment by 10%, and suggest that public ownership may, in fact, be a constraint.

The size of the site can be a key factor in whether or not a site will be reused, with smaller sites being more likely to be reused than larger ones (Longo and Campbell, 2016). Factors such as the neighbourhood characteristics and development activities in adjacent sites can also have an impact on the attractiveness of a particular location. Furthermore, the accessibility of a site can be an important determinant of its reuse potential (Williams and Dair, 2007).

Landowners are primarily interested in comparing the current value to the potential future value following its development (CPRE, 2014). Often, they have unrealistic aspirations of land value and their expectations of what developers are willing to pay (Syms, 2010). They can be hesitant to sell their assets because they speculate that value may increase in the future, and as a result brownfield sites may remain vacant for long periods of time (Syms, 2001).

Developers are often reluctant to develop a site 'when the degree of uncertainty exceeds the risks that they are willing to take on board' (Shephard and Dixon, 2004, p. 104). It is often the case that these sites have significant abnormal costs, the most common of which is associated with the cleaning up of contaminants. Although not all brownfield sites are contaminated, they still have costs associated with removing underground obstructions, the demolition of existing buildings and the poor quality of ground covering (Adams and Watkins, 2002).

The national planning policy seems to be having an impact on the amount of brownfield site redevelopment. The NPPF does not require local authorities to adopt a sequential approach, which prioritises some land types over others, when

allocating land for residential development. This loosening of policy has allowed for larger amounts of greenfield sites to be developed (CPRE, 2014).

The complexity associated with gaining planning permission for a brownfield site can also be a barrier. In part this is due to the amount of documentation needed to comply with assessment of site conditions, contrasting local policy aims and third party interests (Ganser and Williams, 2007). In order to secure planning permission, it may be necessary to make a contribution to the infrastructure costs of the project, which may in turn impact on the project's viability (Burrows, 2014; Crosby, McAllister and Wyatt, 2013).

Out of date Local Plans or the nature of the use allocated for a particular site, can greatly impact on brownfield sites gaining planning permission (Ganser and Williams, 2007). Those who invest in land and property development are reliant upon gaining planning permission if they are to achieve their development objectives, and gain the financial return they hope for (Wiltshaw, 1986).

Developers expect the state both to exercise strategic market management of land use change (Healey, 1992), and to 'protect them from unreasonable behaviour by other actors, such as environmental groups or land owners' (Adams, 1994, p. 106). They need to acquire land frequently to maintain their business activities.

Although there is a separation between investors and developers in the residential sector, this is not the same for the commercial sector, as developers are often financial institutions and investment by mature development companies is not uncommon. However, it has been contended that developers need to be classified in terms of their development purpose (McNamara, 1983), which can be categorised into four groupings: dealers, developer/dealers, developer/investors and investor/developer. Dealers buy and sell land on a short-term basis, viewing property merely as a commodity. Those who begin to undertake development often move from one scheme to the next, without retaining any rights in the land. Developer/investors are the most influential in the sector, but the most important investors in commercial property in the UK have traditionally been insurance companies and pension funds (Adams, 1994).

In 2002, the need for a long-term national brownfield strategy was identified and English Partnerships were charged with developing it in the Sustainable Communities Strategy (ODPM, 2003). In *Securing the Future* (HM Government, 2005), brownfield redevelopment was seen as a vital part of promoting environmental justice by removing degradation in deprived communities, but it has also been seen as beneficial in limiting urban sprawl (Dixon and Adams, 2008). Targets for the use of brownfield land for housing were set in *A better quality of life* (HMGovernment, 1999), which was continued and extended to other uses in *Securing the future* (HMGovernment, 2005). The policy framework for the reuse of brownfield land was outlined in *Planning for the Communities of the Future* (DETR, 1998), which set out a sequential and phased approach to the development of all sites, which would mean a general preference for building on previously developed sites first, especially in urban areas.

However, it should be noted that 'land that is vacant for demand-deficient or structural reasons can remain permanently in the redundant stock' (Adams, 1994, p. 54). Drawing on the definition of redundant space articulated by (Turok, 2015, p. 74) as spaces that have 'outlived their usefulness to the economy and are bypassed by society', it is clear that a feature of these spaces are that they are unused or under-used. However, to be considered as hardcore vacant or derelict space then they need to have been in such a derelict condition for nine years or more (Adams, Disberry and Hutchison, 2017). It is this temporal dimension that I adopt as my definition of redundant space, whilst recognising that the specific time period is somewhat arbitrary and may vary according to the prevailing development potential in the city.

Although there is a policy framework to support the reuse of brownfield sites and these can offer opportunities within a city or neighbourhood, the number of constraints that may need to be overcome can deter private investors from pursuing projects in these areas. This may lead them to establish projects in areas that are easier to develop as a more viable option, which would enable them to achieve a higher financial return.

2.4 Limitations to the economic framing of value

While value can have several meanings, a common distinction is often made between intrinsic and instrumental value. Something is considered to have an intrinsic value if it is valuable in and for itself, that is not dependent on its utility, whilst instrumental value is dependent on the purpose of its use (Freeman, Herriges and Kling, 2014, p. 6).

Economic value is based on the ability of things to satisfy human needs and wants, and therefore relates to its instrumental conceptualisation, or to increase the wellbeing or utility of individuals (Freeman, Herriges and Kling, 2014, p. 7). The economic concept of value has its foundation in neoclassical welfare economics. An individual's welfare not only depends on the goods and services they consume provided by private means or via the government, but also on the quantities and qualities of nonmarket goods and services that flow from the resource-environmental system.

The value of land, as perceived within orthodox economics, is derived from the fact that it is one of the factors of production, with the special quality that it is fixed in supply (Pollakowski and Wachter, 1990; Ryan-Collins, Lloyd and Macfarlane, 2017). Its market (or economic) value is determined not by its inherent value, but rather the purpose for which it will be used, e.g., housing, manufacturing units, leisure, retail etc., which is its bid rent value (Alonso, 1960) and its geographic relationship with the wider economy (Ryan-Collins, Lloyd and Macfarlane, 2017; Gwamna, Zahari and Ismail, 2015; Henderson, Ryan and Phillips, 2019). It has been asserted that markets reflect the attitudes and actions of people in response to economic and social forces (Vries and Voß, 2018). The greater the demand for land, the greater the market value. It has also been suggested that the value can be affected by the prevailing socio-economic factors, such as population levels, income, interest rates and employment levels (Knaap, 1998; Ryan-Collins, Lloyd and Macfarlane, 2017). In addition, it has been argued that underdeveloped land in urban areas is scarce and thus a valuable commodity (Boyer and Polasky, 2004).

However, because the supply of land is relatively inelastic, then demand sets the price (Kivell, 1993) – which reflects the amount that a purchaser is willing to pay (Hanemann, 1991). Indeed, the willingness to pay is taken by welfare economists to

reflect value (Geoghegan, 2002). When considering urban land, the value of a particular plot is not only a result of its own characteristics, but also the amenities provided by adjacent sites (Cheshire, 2009) or the surrounding neighbourhoods (Cheshire and Sheppard, 1998). The value of land is determined by its current permitted use, as designated by the Local Planning Authority using the residual value method (Wightman, 2013). This is calculated by taking the market value and subtracting the depreciated replacement costs of any building. This economic value makes no consideration for any social or environmental value that the land may have. However, market values are intimately linked to government controls and regulations, which represent 'public interests' and are linked to the social value system (Vries and Voß, 2018). Furthermore, this relates to quality of life, which is an important factor when considering the reuse of redundant spaces and its impact on the wellbeing, or spatial equity, of a city's residents.

Investment decisions will often be based on an appraisal of a sites quality and quantity, and will be influenced by the property market's history – rental levels, supply and demand, historic take-up rates, historic supply trends – and the investment returns required by financial institutions that hold property as a long-term investment (Bryson *et al.*, 2017). Land and property markets vary from place to place, due to the influence of local demand and land ownership patterns (Healey, 2007a). Therefore, investing in more deprived areas is considered to carry greater risks and result in lower returns due to the volatility of land values, meaning that investors often do not consider less favoured areas (McGreal *et al.*, 2000).

Most vacant land and property are viewed only in terms of its current or most valuable use from an economic perspective, and the greater the land value the more carefully it is used (Power and Wilson, 2000); however, if it is not developable, it is ignored (Kim, 2016). The key determinants of these land values are the size of the plot; proximity to central areas and local amenities; access to employment; and land-use regulations affecting the land's residential or commercial viability and its intended use (Knaap, 1998; Albouy and Ehrlich, 2014; Gwamna, Zahari and Ismail, 2015). It can also be influenced by the neighbourhood characteristics, so the more deprived an area, the lower the perceived value of land will be (Power and Wilson, 2000), and the general economic performance of the economy at various spatial

scales. If there is no designated use for a particular plot of land, then this lowers its value considerably (Albouy and Ehrlich, 2014).

The development of redundant spaces can take a significant amount of time, and the future use of such spaces are far from certain, due to the vagaries of the planning system. These time and uncertainty factors pose a problem for the way economic value is assigned, due to the short-termism of many investment decisions (Brown and Robertson, 2014).

The assumption that the economic value of land is determined by its scarcity has major implications for weak market cities, due to the abundance of vacant and derelict land that exists. Because of this, developments are unlikely to attract high financial returns, which can act as a deterrent to private sector investors. This economic focus on value means that spatial equity issues are not considered, and social and environmental values do not feature in the consideration on returns to investment. Therefore, it is unlikely that private investors will pursue developments in these areas without the support of the public sector to de-risk projects.

2.5 Urban Regeneration

The term urban regeneration is difficult to define, due to the complexity of the ideas it attempts to encompass (De Magalhães, 2015b). It can also be an ambiguous term, as it is considered by some to be synonymous with urban renewal, urban revitalisation or urban renaissance, but there are subtle differences between these terms, and they are used interchangeably within the academic literature. Urban renewal is concerned with the demolition and physical upgrading of parts of a city, and is seen as an alternative to slum clearance, which had its origins in the UK and USA from the 1930s and 1940s, respectively (Carmon, 1999). Urban revitalisation, which is commonly used in the USA, refers to a set of place-based initiatives aimed at reorganising the existing city structure, particularly in declining neighbourhoods and aims to achieve a rebirth or revival in the conditions and character of that place as a route to improving people's lives (Grodach and Ehrenfeucht, 2015). Urban renaissance focuses on design-led housing developments, aimed at attracting mixed communities into city living as a means of improving social equity (Park and Sohn, 2013). It focuses upon innovative urban design, economic vitality, good governance, environmental responsibility, brownfield restoration, mixed-use developments, quality

streetscapes and public spaces, socially and culturally mixed neighbourhoods, and higher urban densities (Macleod and Johnstone, 2012).

Urban regeneration arose in the 1980s, and is considered to be a process that involves more than just demolishing and rebuilding elements within a city (Jones and Evans, 2013). Rather, it can be viewed as a process for reversing the impact of structural change due to deindustrialisation and to stimulate economic growth (Jones and Evans, 2008). To realise this, requires purposive action from the state through policy and direct intervention to redress the market failures occurring in post-industrial cities (De Magalhães, 2015b). (Turok, 2005) has argued that these actions can be categorised into a focus upon people, business and place. These dimensions are not mutually exclusive, but interrelated and success depends on the recognition of this within a specific geographical context (Tallon, 2013). The concept of market failure is not without its issues, not least the fact that it is used as a justification for government interventions, when the market does not lead to efficient use or distribution of resources (Zerbe Jr and McCurdy, 1999). The idea of economic efficiency must be understood, as it underpins the idea of market failure. It relies on the mutually agreeable benefits that can be obtained from trade (Bishop, 1993), but this is a specific conditional efficiency that relies on the existence of initial endowments which enables trade to take place. Clearly failure in these terms relates to market based economic value. Because my focus is on the reuse of redundant space to help address spatial inequity, I emphasise place-based interventions. I contend that this approach reflects the 'continual search for solutions to address territorial, social and economic inequalities and development capacities' (Bentley and Pugalis, 2014, p. 284).

The policy framework is also subject to multi-level governance arrangements (Bachtler, 2010), which increases the number of actors engaged in the development and funding of policies and programmes.

A number of principles can be identified to reflect the outcomes of urban change (Roberts, Sykes and Granger, 2017). These include simultaneous adaptation to the physical fabric, social structures, economic base and environmental conditions within an urban area, in such a way as to address the problems in a balanced, ordered and positive manner. In order to achieve this, a framework, often in the form of a

strategy, is required. The operational objectives within the strategy should lead to a set of programmes of implementation that can be measured to determine progress in the achievement of key objectives, as well as the recalibration of these in the light of changing circumstances.

Policies tend to be formulated around four broad themes; those aimed at addressing the impacts of economic and employment change; social problems that arise from these changes; the physical obsolescence and new requirements of the urban fabric; and environmental quality (Roberts, Sykes and Granger, 2017).

Place-oriented policies aim to create better places, including physical measures to regenerate buildings and the housing stock, to take care of the urban environment (streets, public spaces, playgrounds, greens) and to provide or improve facilities such as shops, restaurants, pubs, entertainment, sports and transport to make the area more attractive for both locals and outsiders. Making improvements to public spaces helps to improve the vitality of an area and attract more people (Marra *et al.*, 2016).

To deliver the policy aspirations for urban regeneration on the ground, financial resources need to be available. In broad terms these can come from public, private or public-private partnership sources. Using the UK as an example, there has been an evolution of funding sources. Prior to the 1980s, the majority of funding came from the public sector via a mix of local and central government funding, with some attempts to attract private sector funding (Roberts, Sykes and Granger, 2017). From the 1980s onwards, however, new partnerships and forms of delivery agencies were allocated central government funds in order to lever private sector investment. The 1990s heralded a paradigm shift towards competitive bidding for centrally controlled public funds, with a continued emphasis on leveraging private investment.

Resources were targeted on the basis of perceived value-added and the longevity of sustainability. From 1997, the emphasis shifted to area-based interventions with central government funding being allocated on the basis of a needs assessment, but retaining the aim to lever private investment.

Although regeneration is public sector led, the private sector has an important role to play, not least in terms of providing financial resources to enable developments to be

executed. However, their contribution needs to be facilitated and de-risked in order to allow them to make, what they consider to be, an acceptable return on their investments. Various attempts have been made to make engagement by the private sector easier and less bureaucratic, but effective partnerships have proven difficult to sustain under weak market conditions and with limited public sector resources, in terms of finance and people to support these endeavours.

2.6 Gaps in the research literature relevant to this study

Having reviewed the literature, there are a number of gaps that have been identified which this research will aim to contribute to addressing.

Research on third tier post-industrial cities in the UK is limited (Martin *et al.*, 2016b; Pike *et al.*, 2016), and where it does exist there is a major gap in understanding land use challenges, particularly with respect to redundant spaces. Also, how the 'weak market' nature of some of these cities can lead to a lack of utilisation of such spaces remains a glaring omission.

There is a significant literature on the reuse of vacant and derelict land and buildings as a contributor to economic growth (Freire Trigo, 2020; Goldstein, Jensen and Reiskin, 2001), but only limited reference is made on the contribution that the reuse of these spaces can make to addressing spatial equity issues (Currie and Sorensen, 2018), which can be exacerbated the longer these spaces remain unused.

The literature addressing place-based policies has had little to say about the ways in which these can influence geographical inequalities within a city. People-based policies are considered to have this function, but the interaction between these means that they both can make a contribution.

Collectively, all of the vacant spaces that remain unused could be considered as 'redundant' landscapes (Nel *et al.*, 2003), but to date they have not been conceptualised as such and the variety and commonalities between these spaces have not been considered. Addressing this will form a central theme within this research, as the response to addressing these are intimately linked to the causes and consequences of their existence.

Therefore, based on a critical review of the literature and the identification of some significant gaps, the following aim and research questions are proposed as the basis for my study.

2.7 Aims and research questions

The aim of this thesis is to examine whether the reuse of redundant spaces in post-industrial weak market cities, can contribute to addressing issues associated with spatial equity. The empirical chapters are structured around the research questions set out below:

1. How can 'redundant' spaces be conceptualised and their relationship with spatial equity be considered?
2. What is the nature and extent of redundant spaces in post-industrial weak market cities?
3. What are the causes of redundant spaces and what factors are constraining their reuse?
4. In what ways are the reuses of redundant spaces attempting to address spatial inequality?

Without an appropriate conceptualisation of redundant space, it would be near impossible to formulate a defensible argument relating to its reuse. Having a clear view about what it is and what it is not, then enables relationships with spatial equity to be explored. In order to consider the variability of these spaces, it is necessary to move beyond the idea of homogeneity and to understand how widespread redundant spaces are within a city. Understanding how these spaces emerge within the urban fabric and what limits their reuse, is key to understanding the nature of the interventions needed to address these problems. Ultimately, this research is concerned with considering whether or not these reuses actually address spatial equity issues within the city.

Chapter 3. Methodology

3.1 Introduction

The purpose of this chapter is to outline the methodological framework used in this research. First, I present a conceptual framework, followed by a justification for the research approach used, then the analytical framework and the methods deployed, all the while detailing how these are informed by my literature review and resulting research aim and questions.

At the core of this study is a comparative analysis between the redundant spaces within two third-tier, post-industrial, weak market cities in the UK. This chapter justifies the use of comparative cases and outlines an appropriate methodological framework to undertake the analysis. Comparative case study is deemed appropriate, because it is used when aiming to understand the processes and mechanisms behind particular outcomes, and when one or more interventions are being implemented in different contexts (Goodrick, 2014).

3.2 Ontological and epistemological positioning and research design

Critical realism is recognized as a 'philosophy that celebrates the existence of reality independent of human consciousness' (Yeung, 1997, p. 52). Yeung argues that critical realism only provides the initial philosophical approach within the social sciences, while leaving the methodological and theoretical decisions to individual disciplines. This thesis builds on this, taking critical realism as an epistemological starting point to consider the multifaceted nature of the chosen case studies. It recognizes that the world is in part socially constructed, but argue that a fuller understanding views the world as being construed rather than constructed (Easton, 2010). Taking this philosophical position, my research seeks to better understand the causal mechanisms, human agency and relations, actors and networks that influence the reuse of redundant spaces in post-industrial cities (Peet, 1998).

The research design employed in this study, is therefore an intensive approach rather than an extensive one. Intensive research is concerned with how causal processes manifest themselves in a limited number of cases (Sayer and Morgan, 1985). This is the most appropriate approach for my study, as I will be considering the evolution of a small number of redundant sites. It constitutes a departure from other studies of vacant spaces, e.g., (Pagano and Bowman, 2000) and (Newman *et al.*, 2016) that have employed a more extensive research design that aimed to highlight general characteristics of these spaces. However, this approach has been criticised for lacking 'explanatory penetration' (Sayer and Morgan, 1985). Therefore, I use an intensive approach in order to explain how the sites arrived at their current state and the attempts to reuse them.

3.3 Analytical framework

My literature review in chapter 2 empirically examined the conceptualisation and evolution of redundant spaces in post-industrial weak market cities and analysed how doing this can contribute to addressing spatial inequalities within a city. Because my analysis focuses on two cities with four sites in each, then a comparative framework is the most appropriate approach.

This chapter explains and justifies the methodological approach adopted for this study. Because the case studies are multi-layered, covering two cities and four 'redundant' or previously redundant sites within them, an approach that enables an understanding of the evolution of these locations seemed to be most appropriate.

For the cities themselves, key traits or variables were considered to understand their relative performance (Kantor and Savitch, 2005). In order to elicit meaningful information from the various sites, a more relational comparative approach was undertaken, as this recognises the history and geography behind the production and reproduction of cities and the spaces within them (Ward, 2009; Cook and Ward, 2013). It also enables information gained from the detailed examination of one site to inform the investigation of other sites, providing a more sophisticated conceptualisation of the relational understanding of these spaces within the wider context (McCann and Ward, 2012; Ward, 2009).

3.3.1 Comparative case study

When undertaking analysis of urban areas, comparisons are inevitable (McFarlane, 2010; Peck, 2003). In defining these comparisons, it is evident that there are some common traits, and it is useful to identify similarities and differences between chosen cases. The definition of cases and practice of analysing them is highly varied, contested and fundamentally influenced by the theoretical assumptions adopted (Pickvance, 2001). Indeed, it is argued that all research within the social sciences are broadly concerned with making defensible assertions about humans and their environments (Johnson and Onwuegbuzie, 2004).

3.3.2 Case selection

There are multiple ways for selecting cases for use within a study. According to Yin (2013), cases should be chosen based on objective selection criteria; however, Healey (2007) contends that selection is often based on the requirements of research validity and pragmatism. (Flyvbjerg, 2006) argues that there are two types of technique for selecting cases which can then be subdivided into a further six categories. Table 3.1 below illustrates that cases can be selected randomly or based on the expectations of the information that will be collected:

Table 3.1 Strategies for the selection of cases

	Purpose
A. Random selection	To avoid systematic biases in the sample. The sample's size is decisive for generalisation.
1. Random sample	To achieve a representative sample that allows for generalisation for the entire population.
2. Stratified sample	To generalise for specifically selected subgroups within the population.
B. Information-orientated selection	To maximise the utility of information from small samples and single cases. Cases are selected on the basis of expectations about their information content.
1. Extreme/deviant cases	To obtain information on unusual cases, which can be especially problematic or good in a more closely defined sense.
2. Maximum variation cases	To obtain information about the significance of various circumstances for case process and outcome.
3. Critical cases	To achieve information that permits logical deductions of the type, 'if this is (not) valid for this case, then it applies to all (no) cases.
4. Paradigmatic cases	To develop a metaphor or establish a school for the domain that the case concerns.

Source: Flyvbjerg, 2006: 230

One issue with adopting the random approach for this study, is that a population of redundant spaces would be required from which to select cases. Although databases have been constructed, they remain incomplete because some of the sites have not been included in the information gathering stage of the Local Plan. Therefore, an information orientated approach is more appropriate as it allows for smaller samples. In order to gain this more sophisticated understanding, critical cases will be selected as a means of 'clarifying the deeper causes behind a given problem and its consequences' (Flyvbjerg, 2006), instead of merely providing a narrative. A key limitation of this approach is that it can be applied to single cases and does not necessarily relate to a comparative approach, which is at the heart of this study. Therefore, the strategy for case selection needs an additional dimension.

Robinson (2011) provides a summary of the contemporary approaches to case selection in comparative analysis, as illustrated in the table below:

Table 3.2 Summary of urban comparative strategies and causality assumptions

	Comparative Strategy/Basis for Selection	Causality Assumptions
Cannot compare	None	Plural and incommensurable
Individualising	Implicit Any City Case studies not always comparative or theory-building	Historical and specific
Universalising	Most similar or most different	Search for a general rule
Encompassing	Involvement in common systematic processes; often assumptions of convergence as a basis for comparison	Universal but potentially differentiated processes of incorporation into and impact of system
Variation-finding	Most similar: explain systematic variations within broadly similar contexts, on the basis of variables held constant or changing	Universal
	Most different	Either: search for universal causality across different contexts based on similar outcomes Or: pluralist causalities

Source: (Robinson, 2011, p. 5)

The variation-finding strategy allows for small numbers of cases to be used through deploying qualitative and historical methods, and builds on the traditional approaches in urban studies for seeking comparisons across the experiences of relatively similar cities (Robinson, 2011). This in turn enables similar factors to be held constant, whilst isolating those that explain differences (Denters and Mossberger, 2006). This is an important dimension for this study, as I consider sites within cities and examine and compare their evolution. Because of the complexity of the cases selected, a mixed methods approach is most appropriate, combining both qualitative and quantitative data to fully understand the historical and geographical context of the sites.

3.3.3 Selection of cities

The case study cities were selected using the following criteria:

- Third tier city
- Post-industrial city suffering from relative decline
- Weak market characteristics

The work of Hall, Marshall and Lowe (2001) categorised areas into a hierarchy based on three broad levels, with level 1 being the principle cities, in England this is London; level 2 is the major metropolitan areas, which equate to the Core Cities; and level 3 are smaller urban settlements (or cities) often overshadowed by level 1 or 2 areas. Scholars have argued that small cities have for too long been ignored by urban theorists and have been considered to be 'lesser' or irrelevant (Bell and Jayne, 2009). As identified in the literature review, there are few UK studies which consider the performance of third tier cities, with the notable exceptions of Martin, Gardiner and Tyler (2014) and Pike *et al.* (2016). While much of the research to date has tended to focus on the larger cities to develop generalisable frameworks for understanding cities, how applicable such frameworks are to small cities is open to question (Bell and Jayne, 2009; Brachman and Wilson, 2017). Therefore, providing analysis of smaller UK cities constitutes a valuable contribution to urban theory.

The decline of a city's industry can have social, economic and environmental consequences. A physical manifestation of this in post-industrial cities are abandoned buildings, empty houses, large tracts of brownfield land, and general blight (Schlappa and Neill, 2013). Although local development strategies aim to improve the fortunes of such cities, new developments are not always located in the problem areas, often on the outskirts of such cities and therefore do not address the issues. Pike *et al.* (2016) argue that 'Cities coping with [] relative decline have particular economic and social conditions that require policy attention', and one of these is around the reuse of 'redundant' spaces. Decline, per se, is not a problem, so long as cities can recover or display resilience. It is those that display 'weak market' characteristics (Power, Plöger and Winkler, 2006; Schwarz, 2013; Power, 2010) that are of greatest concern. These cities lack the capacity to recover some of their former pre-eminence and suffer from relative decline (Power, 2010).

In order to select appropriate cities, I draw on my prior knowledge obtained from being resident in one of them and having undertaken research to inform a project for my Postgraduate Diploma in Spatial Planning. This project revealed areas with unused land and property as a by-product of considering the development of a landscape plan for the city. Having worked in Economic Development within the North-East, and undertaken analysis of the region and its constituent Local Authorities, I was aware of the strengths and weaknesses of each of their economies. To identify a suitable comparator city to Sunderland, I examine the ranking of cities within the Index of Multiple Deprivation 2015. However, in order to ensure as many variables as possible being directly comparable, as stated in Section 3.3.2, more criteria needed to be added. The most important of these was their geographical location and economic performance.

Hull, Bradford, Stoke and Sunderland all display the characteristics of weak market cities. Looking at these from a geographical perspective, Hull and Sunderland are located in the North-East of England and situated close to the coast, with their histories intimately linked to the sea; whereas Stoke is located in the Midlands and is land-locked – which is also true of Bradford, except that it is in Yorkshire. Hull is the current UK City of Culture and both Sunderland and Stoke were shortlisted for City of Culture 2021; and all three are seeking to enhance their futures through their cultural and industrial heritage. Both Hull and Sunderland have been awarded Heritage Action Zone status by Historic England, with the intention of bringing some of their redundant buildings back into use. Therefore, given the aim, outlined above, of attempting to hold certain variables constant across my case study areas, I selected Hull and Sunderland as most comparable cities for my cases. Examining these two cities has the potential to make significant conceptual and theoretical contributions (Flyvbjerg, 2006; Barnes *et al.*, 2007) to the understanding of how the characteristics of weak market cities impact on their reuse of redundant spaces.

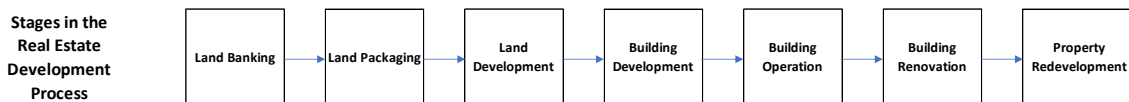
3.3.4 Selection of sites

Sites were identified through a combination of the examination of Local Authority planning and strategy documents, stakeholder interviews and as part of the field work for the townscape analysis in each city. This meant I identified more sites than I had the resources to consider, and thus they were filtered by examining those in

different stages of development – enabling me to contrast the factors influencing the reuse of redundant spaces. The stages used were then derived from the real estate development matrix (Kohlhepp, 2012) as shown below:

Figure 3-1 Real Estate Development Matrix

Real Estate Development Matrix



Source Kohlhepp (2012)

Broadly comparable sites equating to the above criteria will be selected from the townscape analysis undertaken in each city, and the mix of these should provide the basis for answering my research questions.

The period selected for the case studies will be from 1970 to 2017. The post Second World War period had major implications for land use planning, with the publication of the Town and Country Planning Act, 1947, which gave local authorities the power to compulsorily purchase bomb damaged land and buildings for redevelopment. Since then, significant changes within land use planning have taken place, affecting the use and reuse of blighted land and buildings. At the time of carrying out this research, the latest national policy was the National Planning Policy Framework (2012). During this period, cities have suffered from episodes of growth and decline and understanding the response to these is important contextual information for my case studies.

3.3.5 Measuring spatial equity

Within my case studies, I want to consider the impact that the reuse of redundant spaces could have on spatial equity. Although general information will be gathered from the literature, along with information gathered from case study interviews, quantitative data will also be used. The quantitative data will be obtained from the Index of Multiple Deprivation for 2015, which is the latest iteration of measurement approaches aimed at understanding the variation in the geography of social and

economic circumstances (Deas *et al.*, 2016). It is widely used by UK government agencies within the arena of regeneration, as a means of targeting resources into areas that are considered to suffer from various types of relative disadvantage. However, this conceptualisation of deprivation is based on individual and household phenomenon, rather than area or neighbourhood measures. This despite the recognition of the neighbourhood effects on deprivation (Atkinson and Kintrea, 2016).

3.4 Methods of research

Mixed methods approach to research has its origins in work relating to triangulation, based on the ideas of (Denzin, 1970) and has now matured into a recognised methodology (Bryman, 2012) that has been applied in the assessment of spaces in cities (Leary-Owhin, 2016). A key strength of mixed methods is that it enables the researcher to collect multiple data employing a number of strategies, approaches and methods in such a way as to deliver sets of information with complementary strengths and nonoverlapping weaknesses. It is unlikely that the same will be achieved if deploying a quantitative or qualitative approach only (Brewer and Hunter, 1989).

3.5 Conceptual framework

Drawing on the literature review, the conceptual framework for this research relates to the equity principles that underpin sustainable development. Specifically, the concern is with intra-generational equity and how this relates to spatial inequalities (Zuindeau, 2006). Sustainable development looks to improve the wellbeing and quality of life of individuals and communities, as achieved through economic development processes, and thus is concerned with the social dimension of the concept (Jabareen, 2006). Utilising the conceptualisation of sustainability that relates to ecological modernisation, sustainable development can be applied to land use planning. However, the definition of planning still remains contested. Some view planning as an instrument to achieve good outcomes (Alexander, 2009), whilst others see it as a form of governance that constrains or enables action in society (Healey, 1997). Therefore, the framework that I draw on is one that uses an instrumental view of planning to achieve spatial equity, through the reuse of redundant spaces.

3.6 Data collection methods

A mixed methods approach requires data to be collected using approaches that elicit a range of qualitative and quantitative data. This must then be analysed using a comparative parallel design enabling equal weight to be given to the quantitative and qualitative data and to compare the results to look for patterns or contradictions. The comparative case study approach requires more extensive conceptual, analytic and synthesizing work than a single case study would (Goodrick, 2014).

Analysis of secondary data

Secondary data were used to carry out the spatial analysis element of this project, relating socio-economic and environmental data with redundant spaces. This analysis was limited by the availability of data at a Lower Standard Output Area level.

Spatial Analysis/GIS/Visualisations

The identification of redundant spaces necessitated the construction of a database that enabled me to analyse their distribution and concentration. Building an appropriate database of redundant spaces, however, posed several challenges. It first required an operational definition that allows the various types of spaces to be identified. Previous mapping exercises have tended to focus on vacant and derelict spaces, utilising existing databases (Bowman and Pagano, 2004; Newman *et al.*, 2016; Pagano and Bowman, 2000) or building a specific resource utilising specific criteria (Pereira, 2011). However, there are no studies that encompass the specific types of spaces that I am interested in. Until 2012, the UK Government compiled the National Land Use Database (NLUD) aggregated from information provided by Local Authorities. Since 2010, the scope and quality of the data has diminished, rendering it unfit for purpose and thus it was discontinued in 2012. From 2020, Local Authorities are required to publish brownfield registers of land suitable for housing development.

Photographs provide a visual narrative for a specific location, which words alone cannot capture. They give context to the specific site by providing a representation of

the surrounding area. When linked with maps, they are better able to illustrate the character of an area.

Administrative data for identifying redundant space

As part of the development of Local Plans, Local Authorities are required to carry out a Strategic Housing Land Availability Assessment (SHLAA) and an Employment Land Availability Assessment (ELAA), that identifies land that can possibly be developed for residential and commercial purposes. These are available for both Hull and Sunderland. The databases provided by the Local Authority Planning departments are a set of shapefiles of the various housing and employment sites. They contain the site name, size and location as well as an estimate of when they will be developed. The continued existence of these spaces will need to be verified, as the survey work carried out for them could be well in advance of their publication and the time since they were published may mean that some of the spaces have been utilised. A range of techniques were used to verify the existence of these or new spaces, which will include stakeholder interviews, newspaper articles, planning applications and the use of neogeography techniques applied to Google Earth. The application of neogeography, the use of digital aerial photography and satellite images to identify areas that are digitised, can also be used to identify other parcels of land (Johnson, Belblidia and Campbell, 2011; Lin, 2013), and so these approaches were applied to identify unused spaces not brought forward for inclusion in Hull and Sunderland's Local Plans. Having identified the spaces, the relationship between them and socio-economic and environmental indicators will then be explored, subject to data availability, to determine if they have any identifiable impacts on their surrounding areas. This recognising that the direction of causation will be difficult to determine.

Historical and contemporary photographs, or illustrations, of the sites and their surroundings will be used to add context, or what (Latham, 2003) calls texture to my case studies. Although such images will hopefully elucidate the issues highlighted, they cannot be treated as 'transparent reflections of fact' (Samuel, 2012) and should be considered as representations (Hall, 1997; Leary-Owhin, 2016).

Documentary analysis

Official sources from national and local authorities and agencies, will be utilised through a systematic procedure of review and evaluation (Bowen, 2009). This will help me to understand the evolution of the cities and the specific sites identified for detailed consideration, in order to carry out the process of 'meaning-making' (Yanow, 2006) – as well as gathering event evidence. These include strategies, planning and policy documents, to identify changes over time and to elicit some of the proposals for future development. Specifically, I use these to consider changes in land use planning and the focus or otherwise of the use of vacant and derelict land. They were also used to examine how national policy, and thus discourse, has shaped the local context for development. However, it is not my intention to carry out any formal discourse analysis, but rather to recognise the political and/or institutional context of policy changes. Several of the sites I have identified, have now or previously had documents that outline plans for their use which have changed over time, or else not been implemented. These provided an important component in understanding the evolution of these spaces.

Site reviews

These data were collated into an integrated assessment of each case study site. This approach will build on the Site Analysis (LaGro, 2008) method, which at its core generates a site inventory and a broad understanding of relevant contextual factors and attributes covering physical, biological, and social or cultural factors. However, this method is a current state analysis, and for my purposes, I am interested in the evolution of these sites and future plans for them. Therefore, my site reviews consider different transitions proposed for these sites and identify the extent to which they were implemented. This research tool was an invaluable aid to understanding the evolution and transitions that have taken place on my selected sites. An example of these is included in Annex A.

Rudimentary townscape analysis

In order to develop an inventory of redundant spaces, it was necessary to engage with the urban landscape of the two case study cities. Some redundant sites were detailed in various Local Authority plans and strategies, and were the subject of

discussion with various stakeholders. Although this will give an idea of the location of the sites, further exploration of the surrounding area may identify other areas of interest (Wolfe, 2017). To facilitate this, a rudimentary landscape analysis has been undertaken of these areas (Landscape_Institute, 2018) and my observations were photographed. This enabled me to create a matrix of the types of spaces I encounter; however, an appropriate way to classify these was needed. There have been various attempts to do this, e.g., (Greenberg, Popper and West, 1990; Berger, 2007; Kim, Miller and Nowak, 2015), but none of these offer a cohesive classification scheme that can be readily used and repeated across cities. Rather, each introduced a conceptual typology that was limited only to the case under investigation (Lee and Newman, 2017). The classification system offered by (Lee and Newman, 2019) offers a framework that overcomes these issues, and so is used as part of the townscape analysis. This is illustrated in Table 3.5.

Table 3.5 Types of redundant spaces

Types of space	Examples of spaces					
Industrial	Factory unit	Industrial site	Shipyards	Port	Brewery	Warehouse
Institutional	Theatre/Cinema	Former Council offices	Religious buildings, e.g., Church	Emergency services buildings	Sport centre	
Recreational	Land cleared of previous commercial uses	Land remaining after residential clearance	Residual spaces left after reconfiguration of properties			
Remnant	Land remaining after commercial development	Land left over after a residential development				
Reserved	Land held for residential development	Land held for strategic development purposes by planning authority	Land held for development at a later date (land banking)			

Source: Author's own adapted from (Lee and Newman, 2019)

Industrial spaces are those that remain after the process of deindustrialisation has led manufacturing firms to close, relocate or downsize, leaving large tracts of land and empty commercial properties. Institutional spaces result from civic or municipal buildings being no longer required, and so falling out of use or not being required at its current scale. Recreational space is undeveloped land, often designated as urban green space. Remnant land is often left-over space after a commercial or residential

development has taken place, but remains unused because of its' size or location. Reserved spaces are areas that have been given a land use designation for development in the future, but due to the preferences of the owner or the market conditions remain undeveloped.

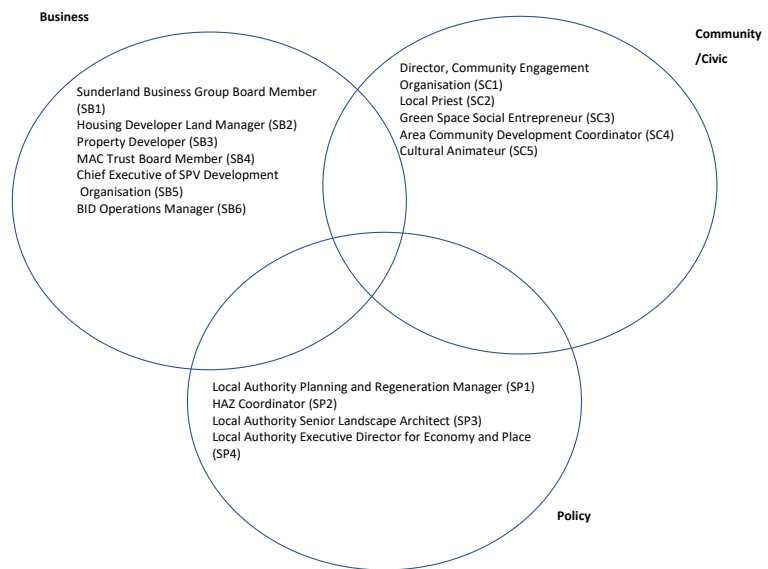
Semi-structured interviews with stakeholders

Although information about my identified sites and the historic and future development of the city can be obtained from various documentary and statistical sources, to develop a deeper understanding of the impacts and future opportunities, it is important to engage with a range of stakeholders. These will need to be a mix of those affected by decisions made and those making the decisions (Reed *et al.*, 2009), and so interviewees were selected from three broad stakeholder groups within each city and a selection of national organisations. The profile of the interviewees are shown below:

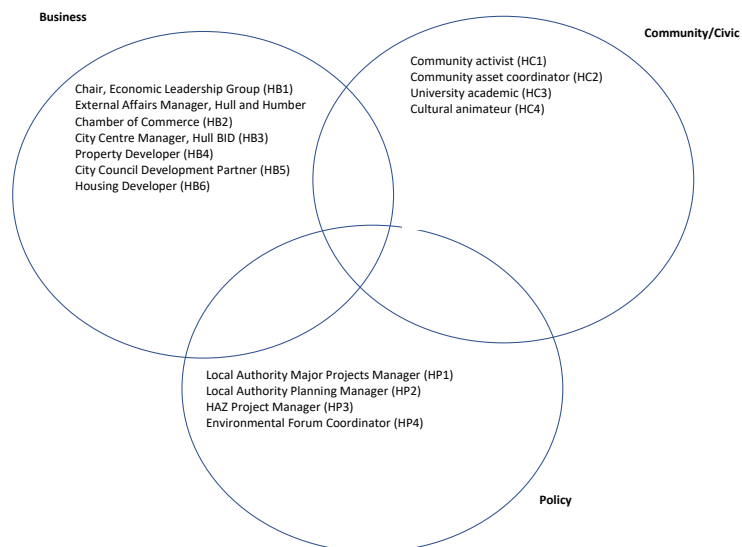
National

- Team Leader Housing Need, MHCLG (NP1)
- Policy Research Officer (NP2) and Regional Policy Lead North-East and Yorkshire, RTPI (NP3)
- Director of Policy and Acting CX, TCPA (NP4)
- Planning Lead, LGA (NP5)
- Director of Policy, British Property Federation (NP6)
- Historic England Policy Advisor (NP7)

Sunderland



Hull



Because the focus of my research is on particular sites within two cities where projects are in progress or being developed, there were specific organisations or individuals to approach to interview. However, this was not always the case and to identify the relevant interviewees, key informant interviews were undertaken. This type of interview enables access to specific knowledge about people and processes that may not be available from other sources (Edwards and Holland, 2013; Kumar, 1989). The drawbacks to using key informants is that they can mislead the

interviewer or withhold key information (Edwards and Holland, 2013) or the information provided can be subject to bias (Kumar, 1989) or be subjective (Acaps, 2011). Because the main purpose of these interviews is to identify additional potential interviewees and to gather information about key developments taking place within each city, these drawbacks are unlikely to be a major issue as the likelihood could be explored within other interviews. Other interviewees may also suggest people that could be worth speaking with, and where appropriate these will be followed up. It is recognised that chain referral sampling or 'snowballing' (Biernacki and Waldorf, 1981) requires people to be identified to start the chain. In my research, key informants were used to begin the chain.

Local and national policy interviewees are likely to be more difficult to identify, and so again key informants will be used to suggest contacts, as well as through examining reports and policy documents and carrying out web searches for contacts in particular government departments.

The use of semi-structured interviews should enable a verbal interchange around a number of predetermined themes through conversation, allowing for the opportunity to explore issues as they arise (Longhurst, 2010). The range of themes to be explored will be tailored to the context of the individual interviewee (Dunn, 2000) reflecting their knowledge, expertise and interests. Themes will be adjusted in light of information obtained from previous interviews, to enable key issues to be explored more fully.

Interviews were actually undertaken between February and December 2018, using a combination of face to face and telephone interviews. All community/civic interviews were conducted face to face and all national interviews were undertaken by telephone. The local business and policy interviews were conducted as a combination of the two, with the adopted approach arising from the interviewees preference due to location and availability. Although, there is evidence to suggest that qualitative face to face interviews can provide a richer source of data due to the length of interview possible and the rapport that can be achieved recognised (Jackle, Roberts and Lynn, 2006; Gillham, 2005; Vogl, 2013). This did not arise as an issue with the telephone interviews, in part due to the nature of the interviewees and their familiarity with telephone communications (Novick, 2008). The average length of my

telephone interviews was 45 mins and 55 secs, compared with 78 mins and 50 secs for face to face. Much of the difference in duration was due to the face-to-face contacts, including site tours as the interviews were conducted. In total, I collected 29 hours and 57 minutes of interview material from 28 interviews, providing a rich source of material in addition to the documentary analysis and secondary data sources.

It must be acknowledged that there is a risk that requiring people to recall the history of the identified sites may lead to some inaccurate information. However, the mixed methods approach employed helped ameliorate this using the corroboration of factual details (Bryman, 2012; Denzin, 1970).

Prior to conducting an interview, each potential interviewee was sent a participant's briefing note outlining the purpose of the exercise. It explicitly explained how the information will be utilised and how their contributions will be recorded in this thesis. Just before the commencement of the interview, participants were asked to sign a consent form to agree to the process, including the recording of the discussion and indicate whether or not they are happy to be quoted directly. The briefing note and the consent form are included in Annex B.

3.7 Analysing the data

The multiple data sources used, required different analysis techniques. Information gathered from the interviews and the documents considered, were organised into themes relating to the conceptual framework outlined in Section 3.5. The relevant information was then transferred into the site reviews or considered within Chapter 5. Secondary data was used to construct trends in the performance of each city within economic, social and environmental domains. Where it was available in an appropriate format and scale, it was used to produce visualisations in terms of maps. Photographic images were used to provide a visual context to the findings in Chapters 6,7 and 8.

However, the main tool for collating this data and bringing it into a coherent form, were the Site Reviews. These were pivotal for the analysis of the data, as they allowed for the geography and history of a site to be considered.

3.8 Ethics and positionality

Although the case study cities were selected using objective criteria, one of them, Sunderland, is the city in which I live and have undertaken assessments of its economic performance, both for academic purposes and to inform the development of policy interventions, as mentioned in Chapter 1. I also conducted a project to develop a landscape plan for the city, which is where I became aware of spaces that had remained disused for long periods of time. Also, having worked in the field of economic development within the North-East of England, a number of my key informants were already known to me, or I had worked with others within their organisation. All of these factors provided me with an initial view of the city from an economic perspective. However, the bias this could have introduced was ameliorated by using key informants to identify other potential interviewees; and using the snowballing technique from then on meant that I was engaging with individuals and organisations of whom I had no prior knowledge or relationship. These issues were not repeated for Hull because until I began this research, I had never visited the city nor undertaken any analysis that included it.

To obtain confirmation of informed consent, interviewees were sent a participant's briefing note which outlined what potential interviewees were agreeing to participate in, whilst giving them the option to decline or withdraw (Dowling, 2005). The briefing note provided potential participants with a description of my background, the thesis research aims, as well as how they would be referenced with regard to material used from the interviews (Dowling, 2005). The research also abided by accuracy ethics by ensuring that interview materials were not contrived or fabricated, and reflected the material gathered (Christians, 2005). The research project was also subject to ethical review by Newcastle University and received approval.


My positionality as a researcher conducting interviews with the various stakeholders, was important to establish in order to build trust and rapport with my research participants (Mikecz, 2012). The participant briefing note was an important component of this, because as well as providing background to my research, it also located me within a credible research institution and provided a means for potential interviewees to validate the information I had given them, if they wished to do so.

My position with respect to the research task and its social and political context (Darwin Holmes, 2020) follows that of (Loures, 2015) who considers the reuse of abandoned and derelict land and property to bring major economic and social benefits to an area. This ameliorates some of the negative aspects that can accrue if left idle for long periods of time (Bowman and Pagano, 2004).

3.9 Concluding remarks

The purpose of this chapter has been to explain and justify the methodologies adopted in this research. The methodological framework used, is derived from the theoretical and conceptual ideas discussed in Chapter 2.

Table 3.6 Summary of methodological framework

Theoretical Framework	Sustainable Development specifically spatial equity			
Comparison and case type	Key trait and Relational comparison of critical instance cases			
Comparator cities	Kingston upon Hull		Sunderland	
Unit of analysis	Sites within cities			
Methods of research	Mixed method case studies utilising the following elements:			
	Analysis of secondary statistical data	Spatial analysis /GIS/Visualisations	Documentary analysis	Stakeholder Interviews
				

I have attempted to justify the methodological choices I made, by responding to critiques of the approaches used. Also, the central role of the Site Reviews in analysing the data has been highlighted.

Chapter 4. Evolution of economic development, planning and regeneration policies in England

4.1 Introduction

The purpose of this chapter is to consider the evolution of economic development and regeneration policies, and the changing ideologies that underpin them. In doing so, it will provide a framework for considering the context of the performance of Hull and Sunderland and the tools available to them for addressing redundant spaces.

Primarily, regeneration policies are concerned with addressing spatial disparities and their associated equity issues. The interventions are prompted by the desire to address market failures (Tyler *et al.*, 2012) and can be ‘people-focused’ or ‘place-focused’, depending on whether they reflect differences between people or areas (Cheshire, Nathan and Overman, 2016). In practice, local and regional economic development policies in the UK and elsewhere tend to combine the two, ‘reflecting political aspirations both to improve individual life chances and to achieve ‘spatial equity’” (Cheshire, Nathan and Overman, 2016, p. 36). The idea that urban areas need regenerating, is derived from a particular understanding of what causes economic and social decline within cities and of the appropriate policy responses. At its core, is the proposition that the economic, social and environmental issues faced by an area are most effectively addressed as problems *of that area*, rather than issues that just happen to take place in that area (De Magalhães, 2015a). This conceptualisation began to take shape in the late 1960s, when urban policy began to focus on the revitalisation of these areas. Table 4.1 below illustrates the various periods of Urban Policy since 1945 to the present – although the main periods of interest are from the 1970s onwards.

Table 4-1 Periods of Urban Policy, 1945 - 2017

Periods of UK Urban Policy, 1945 - present

Period	Problem construction		Policy response
1945-1968	housing problems, urban sprawl and ribbon development, need to comprehensively redevelop city centres, and to relocate jobs and populations out of congested city centres		Housing and town and country planning. Physical 'bricks and mortar' approach. City centre redevelopment
1968-1977	social pathology approach. Limited to small areas of towns		small scale area based initiatives. Largely experimental
1977-1979	Structural approach contained in Urban White Paper 1977 'Policy for the Inner Cities'. Assumed problem urban decline lay in 'societal forces'		Urban White Paper and Inner Urban Areas Act 1978. Attempted to develop an integrated approach, the formation of partnerships, a new role for the private sector, and reference made to the community and voluntary sectors. Still small scale
1979-1991	Mixture of structural and social pathology approaches. Urban problems seen as a product of too much state intervention, individual and group dependency; and restrictions of the free market		1. roll back the state 2. encourage self help 3. free up the market. Produce property-led urban regeneration - physical renewal in profitable locations. Public-private partnerships. Multiplicity of initiatives lacking coordination. Emphasis on better management of programmes. Local government marginalised as part of the problem
1991-1997	Retained elements of previous period but recognised deprived communities were largely bypassed. Key problems seen to be to ensure that excluded communities benefit from policies, and address incoherence of area-based initiatives and level of governance.		Development of new multi-sectoral partnerships. First in City Challenge, then Single Regeneration Budget (SRB)
1997-2010	A twin focus on improving economic competitive of cities and addressing urban social exclusion and disadvantage		Urban renaissance approaches such as URCs and BIDs; neighbourhood renewal approaches such as NDCs and Sure Start. Creation of NRF and SEU. RDAs created. Attempt to streamline and coordinate multiple initiatives and levels of governance.
2010-	Public sector deficit and debt and impacts of global economic downturn on the private sector; decentralisation and localism agendas		Economic growth policies and localism policies

Source: Adapted from (Tallon, 2013, pp. 28-29)

4.2 Post war developments

At the end of the Second World War, the most obvious urban problem was the legacy of bomb damage in many of the major cities across the UK (Atkinson and

Moon, 1994; Tallon, 2013). It was during this period, that it could be argued the UK experienced its first form of regeneration in the guise of post-war reconstruction projects. This was in recognition of pockets of deprivation in older cities and a growing consensus that area based interventions were needed (Atkinson and Moon, 1994; Mullins, Murie and Leather, 2006). The emphasis was firmly on physical development (Cullingworth and Nadin, 2006) and involved significant slum clearance (Jones, 2010). However, new house building did not always take place in the same location, as peripheral developments began to emerge as it was perceived that these would offer better living standards. This approach was only possible because of the cooperative culture that developed between the major political parties during this period. The pace of the change was set by central government, and it also provided guidance for local authorities on principles and standards that should be adopted in their redevelopment plans, in the form of the Town and Country Planning Act, 1947. This Act required each local area to produce a Development Plan for land use (Hall and Tewdwr-Jones, 2011), which were very much focused on individual sites within the local area – with most of the funding coming from public sector investment. The emphasis during this period was on reconstruction, replacement and the eradication of the physical problems of the past, through partnership working between the national government and the local authorities. As well as a major focus on housing through slum clearances and rebuilding, there was also wider development of city centres (Tallon, 2013).

The demand for new housing grew and so a period of suburbanisation took place, with much of the new council housing being developed in areas on the outskirts of the cities (Beswick and Tsenkova, 2002). This suburbanisation and the relocation of industry had a negative effect on inner cities. Peripheral areas continued to grow through the 1960s, with significantly less attention being given to city centres leading to visible signs of economic, social and environmental decline. The inability of state policies to address the issues plaguing failing local economies, led to the belief that the current system of urban development was inadequate (Barnekov and Rich, 1989).

The government responded with the development of 'Urban Aid' in 1968, which was delivered by the Home Office as the problem was perceived as one of law and order

due to social unrest (McCarthy, 2007). The General Improvement Areas established under the 1969 Housing Act were amongst the first initiatives aimed at addressing the physical decline experienced by UK cities.

It became apparent in the 1970s, however, that this experimental approach based on social pathology was flawed, and the idea that inner city policy could be solved through compensatory social policy was rejected (Harding and Nevin, 2015). The emphasis shifted to being more economic focused. There was a concern that something needed to be done about the economy as the impact of globalisation began to be felt, which along with the recession triggered by the Oil Crisis led to a loss of manufacturing jobs within cities. The Urban Programme, which was developed after the Urban Areas Act was passed in 1978, provided grants to local authorities up to a value of 75% of the cost of delivering programmes, to address the social needs in their areas that resulted from urban deprivation. However, many of these projects were small scale, taking an experimental approach to local initiatives (Tallon, 2013).

From there, the focus again shifted to emphasise economic and environmental objectives, in particular through the 1977 White Paper 'Policy for the Inner City' and the widening of the scope of the Urban Programme and a greater targeting of resources (Cullingworth and Nadin, 2006; Deakin and Edwards, 1993). A key aim of this policy document was to lever a greater contribution from the private sector, and signal a change in the way that Local Authorities operated within this realm, shifting the focus to industrial, environmental and recreational schemes at the expense of those with a social or community focus (McCarthy, 2007). A greater emphasis was to be placed on partnerships between public agencies involved in urban regeneration and an 'enhanced urban programme'. Resources were allocated on a hierarchical basis, depending on whether an area was defined as a 'Partnership', 'Programme' or 'Other Designated District' (Atkinson, 1995). The purpose of this was to enable more effective targeting of resources to areas of greatest need. Although, the bureaucratic approach and lack of integration and coordination with other organisations, meant that the impact of this new funding approach was marginal (Lawless, 1986).

4.3 New urban entrepreneurialism

Urban policy was radically transformed following the election of Margaret Thatcher, who brought the philosophy of the New Right to the fore. 'This transformation has been described as a shift from urban managerialism towards urban entrepreneurialism' (Oatley, 1998, p. 4). With the political ideology shifting from Keynesian to post-Keynesian policies (Deakin and Edwards, 1993). The problems faced by urban areas were diagnosed as resulting from too much state intervention and public spending; too much dependency by individuals and groups on the state; and restrictions on the free market (Tallon, 2013). Local Authorities, and the public sector more generally, were seen as part of the problem contributing to the under-performance of cities and the wider economy (Brindley, Rydin and Stoker, 2005). This new urban entrepreneurialism was driven by wider neo-liberalism, favouring economic liberalisation and the market. The Urban Programme continued, accompanied by additional funding under the Action for Cities Programme including the Urban Development Grant and Derelict Land Grant, along with several area-based initiatives. It moved the focus of the Urban Programme towards economic projects with the emphasis on physical, as opposed to social, aspects of regeneration (McCarthy, 2007).

Although the New Right's aim was 'rolling back the state', this was not true at all levels. The Thatcherite urban policy was very much focused on reducing the powers, and funding, of local authorities (Jones and Evans, 2013). However, this did not mean that the private sector took control of urban redevelopment, as central government took greater control of spending at a local level. This heralded a confrontational approach from central government towards local government with rate capping, cutbacks, abolition and the implementation of quangos, which bypassed local authorities' powers for the development of their cities. These powers were underpinned by grant aid that could be bid for. This could occur as part of a single Urban Programme designation, which had removed the previous hierarchy approach or a series of other grant aid initiatives such as the Urban Regeneration Grant – which replaced the Urban Development Grant (1982-1988) – and the Derelict Land Grant, which were administered by Local Authorities (McCarthy, 2007). The 1988 'Action for Cities' statement simplified these into a single City Grant, but its aim was to stimulate private sector urban investment. This was since it was paid

directly from central government to the private sector, thus continuing the exclusion of local government from urban regeneration initiatives (Atkinson and Moon, 1994, p. 208). Despite this, the allocation of this funding was on the single Urban Programme areas, of which there were 57.

Probably the most significant quangos introduced in terms of urban regeneration during this period, were the Urban Development Corporations (UDCs). These were populated by members nominated from a business background on their boards, with the remit to drive change in their designated areas. They had the objective of 'pump priming inner city land values through infrastructure projects, creating and enabling new spaces of production and consumption, and utilising private sector capital as a mechanism for revitalising the cities' (Imrie and Thomas, 1999, p. 4). The 13 UDCs were designated into four phases, with the first in 1981 to establish London Docklands and Merseyside; the second (1987) established a further five (Black Country, Cardiff Bay, Teesside, Trafford Park and Tyne and Wear), the third (1988/89) created Bristol, Sheffield, Central Manchester and Leeds. The final phase established UDCs in Birmingham Heartlands and Plymouth in 1992/93. These varied considerably in the size of their designated Urban Development Areas and the amount of financial resource they were allocated. Their lifespan was expected to be 10 years, but not all of them lasted that long. They were funded from an annual budget from central government; finance borrowed from the national loan fund; and the utilisation of receipts from land sales with the power to purchase land by agreement, to 'vest' it from public sector bodies, and/or to compulsory purchase it from private sector landowners (Imrie and Thomas, 1999). The UDCs operated as property-led regeneration bodies, with the specific remit to secure parcels of land and property for development (Coulson, 1990). Their aim was to secure economic growth by acting as a catalyst for private sector development interests. Within their boundaries, they were the planning authority and central government could intervene in relation to conflicts between the UDC and the Local Authority on adjacent land (Lawless, 1986).

The Enterprise Zone (EZ) concept was originally developed in the UK at the beginning of the 1980s. They were introduced in the 1980 Local Government, Planning and Land Act as an experiment designed to remove many of the perceived

bureaucratic barriers to development in specific areas, caused by the planning system (Lawless, 1986). Drawing on the work of Hall (1977), they provided simplified planning requirements but were implemented by Local Authorities. They constituted spatially targeted initiatives which were very much economically focused, with little consideration given to environmental concerns. The boundaries of these zones proved to be highly controversial and in some cases derelict areas that would prove difficult to develop were excluded (Lawless, 1986), with the aim of securing physical and economic regeneration in areas that were unable to attract private sector investment or able to benefit from traditional urban and regional policy instruments (Potter and Moore, 2000).

The first phase of the 11 UK EZs was set up in 1981/82 for a 10-year period, followed by a second round of 14 new zones and 2 extended zones designated in 1983/84. These lost their status after 10 years, but a further round of EZs were designated in the late 1980s and early 1990s. The EZs were small scale and contained vacant land and property, often over various sites. Tax incentives and simplified planning regulations were aimed at attracting private sector developers. Properties in these EZs were exempt from business rates, enhanced capital allowances against corporations and income tax liabilities for investment in property, Development Land Tax, Industrial Training Board Levies, and a reduction in requirements to respond to government statistical enquiries. None of these were available outside of EZs, thus reducing the costs of operating within these areas. The incentives were often accompanied by public sector infrastructural investment in the designated area. Again, the EZs were examples of property-led regeneration, and the boundaries of these zones proved to be very controversial, and in some cases, derelict areas that would prove difficult to develop were excluded (Lawless, 1986).

These initiatives were aimed at curtailing the power of Local Authorities, but at the same time the broader framework for planning used, came under scrutiny with the publication of the 1989 White Paper: 'The Future of Development plans'. The plans had only been introduced in 1985 to enable planning authorities to gain the mechanisms to integrate land-use, economic and social priorities, which were strengthened through the Planning and Compensation Act, 1989. The shift during

this period was very much about public sector funding supporting the priorities of the private sector, but there were also growing concerns about the environment (Roberts, Sykes and Granger, 2017).

Perhaps a surprising focus during this period, was the recognition of the economic potential of heritage assets to be mobilised as part of physical regeneration (Pendlebury and Strange, 2011). As local authorities began to embrace culture as part of their regeneration toolkit, the historic environment became a vital source of income for some cities (Pendlebury and Strange, 2011).

Targeted spatial interventions could be seen as a means to address the areas of greatest need, but given the more dominant role of the private sector an alternative view could see this as focusing on areas in order to 'stimulate profit-seeking private investment', whilst ignoring more problematic areas (Ward, 2004).

4.4 The New Labour era – neighbourhood renewal and the urban renaissance

Following the election of a Labour government in 1991, a more comprehensive form of policy and practice was introduced (Roberts, Sykes and Granger, 2017), with the emphasis shifting towards a more integrated approach with the explicit aim of making good industrial decay. There were three dimensions to the policy during the period 1991-97, which meant a change in the process of urban funding and a reorientation of the substantive aims of policies (Oatley, 1998). The first was to focus on the competitiveness of cities that were struggling to establish their role in the urban hierarchy. Secondly, the government introduced a range of competitive bidding initiatives, and the third was a reorientation of urban governance and the processes of policy implementation. The first initiative based on competitive bidding processes was the City Challenge (Oatley and Lambert, 1998), seen as a response to the problems of coordination experienced in the 1980s (McCarthy, 2007), which ushered in an era of 'New Localism' (Jones and Evans, 2008). They were multi-agency partnerships which, in order to engage the private sector, encouraged Local Authorities to adopt fast track decision making processes to ensure responsiveness. Their budgets were top sliced from other programmes (Cullingworth and Nadin, 2006), and again these initiatives were criticised for a lack of coordination and because of this there were only two rounds of these initiatives before the resources

were incorporated into the new Single Regeneration Budget (SRB) (McCarthy, 2007).

It was believed that a more coherent approach might be achieved by integrating regional budgets and locally coordinated area-based strategies. In all, 20 previously separate programme budgets were subsumed into the SRB, and the allocations for the funding were primarily aimed at land and property regeneration. However, the emphasis was on creating jobs for local people (Blackman, 2013), and so were not exclusively targeted at areas of deprivation (Tallon, 2013). The SRB was coordinated by the Government Offices for the Regions (GORs), but it represented a continuation of the characteristics of the City Challenge, as it was based on a partnership model with competitive bidding for funding and payment by results. The overall objective of SRB was to enhance the quality of life of people living in areas of need, and to reduce the gap between deprived and other areas by addressing the multiple problems faced in deprived areas (Oatley and Lambert, 1998). SRB continued to be delivered by GORs for the first four rounds of the funding and by RDAs, which had been established in 1999, for the final two. This represented a devolution from central government to the regions for decision making about major regeneration funding (Cullingworth and Nadin, 2006, p. 370). However, it could also be seen as a shift away from the areas of greatest need to those with potential for development (McCarthy, 2007).

Alongside SRB, a new body, English Partnerships, was established by the Housing and Urban Development Act, 1993, aimed at extending elements of the UDC model by promoting job creation, inward investment and environmental improvements, achieved through reclaiming and developing vacant and derelict land and property (McCarthy, 2007). This ushered in a shift towards centralisation as English Partnerships were accountable to Parliament. By 2006, they were considered to be a key instrument to support growth and were targeted towards areas of greatest need, including the 20% most deprived wards.

During the period of 1997 and 2010, the shift in regeneration policy under New Labour was as significant as it had been in 1979 under the Conservative Government, despite promising to keep the previous government's spending plans and continued commitment to neo-liberal urban policies (Tallon, 2013). Past

regeneration experience was brought back, with a return to a social pathology approach, a continued focus on small areas and the view that physical change and development were the solution to multifaceted problems (Shaw and Robinson, 2010). The policy focus was on two broad themes: 'urban renaissance', which were physical, economic and city-centre focused; and those of 'neighbourhood renewal', which concentrated on more social aspects of multiple deprivation in the city centres, but also peripheral social housing estates (Tallon, 2013). Soon after the election of the Labour Government in 1997, an Urban Taskforce was formed under the chairmanship of the architect Richard Rogers, who was charged with identifying the causes of urban decline and identifying practical solutions to the problems. Its final report 'Towards an Urban Renaissance' published in 1999 (UrbanTaskForce, 1999), popularised the concept of 'urban renaissance' and many of its recommendations were drawn upon for the Urban White Paper (DETR, 2000). Although the White Paper set out a number of initiatives to achieve an urban renaissance, it was heavily criticised for an excessive focus on design to the detriment of the prevailing economic and social issues (Cooper, 2010), and it called for a return to city living (Lees, 2003).

From 2000 onwards, at the Local Authority level, Local Strategic Partnerships (LSPs) were being created by bringing together public, private and third sector partners to identify the means of addressing local issues and allocate the necessary funding (Tewdwr-Jones, 2012). However, they were usually led by Local Authorities and were reliant upon funding via the SRPs. Subsequently, each LSP was required to develop a Local Area Agreement (LAA) focused on achieving targets in support of the objective of sustainable development, which attracted funding directly from Central Government and mediated by Government Offices. The most deprived areas also received Neighbourhood Renewal Funding, which required stretch targets beyond those set out in LAAs.

The regeneration landscape had become a complex array of organisations and funding sources, often with overlapping or competing priorities, which was costly to deliver and there were concerns about the duplication of funding. However, the financial crisis in 2008 curtailed significant amounts of public sector funding, impacting on all government departments and the subsequent allocation to other

public bodies. Table 4.2 below shows the change in spending by English local authorities over the period 2016-2017, and highlights the significant cuts to both planning and development, and housing services.

Table 4.2 Changes in local authority net current expenditure in real terms 2010-2011 to 2016-17

Service area	% Change in spending	£m change in spending
Planning and development services	-53	-1180
Housing services (not including Housing revenue account)	-46	-1245
Highways and transport services	-37	-1270
Cultural and related services	-35	-1204
Environmental and regulatory services	-17	-910
Central services	-15	-485

from NAO Financial sustainability of local authorities 2018 figure 7

Source: Gray and Barford (2018)

This major reduction in funding led to an erosion of planning departments within local authorities, both in terms of financial and human resources (Author interview NP4; Haughton and Hincks (2013), limiting their capacity to do much more than the statutory requirements of plan making and development management.

As a result of this changing perspective, the planning system was reformed through the 2004 Planning and Compulsory Purchase Act, that aimed to rebrand planning as a more positive instrument to create and maintain sustainable communities (Shaw and Lord, 2009). This heralded a significant shift from the previous land-use regulation role of planning and provided the means, in land use terms, to create an urban renaissance through the socially sustainable redevelopment of cities (Colomb, 2007).

In 2008, the Housing and Regeneration Act led to the replacement of English Partnerships, which had been essentially operating as part of the RDA at the regional level, with the Homes and Communities Agency (HCA). The HCA took responsibility for strategic land use nationally and became a key consultee on Local Plans, with a focus on housing.

4.5 The coalition governments approach to regeneration

With the election of the Coalition Government in 2010, plans were put in place to remove the regional tier, viewing it as an unnecessary level of bureaucracy. This led to the closure of Government Offices, the demise of RDAs and a restriction on all activities, with the exception of some areas of recognised growth. Some considered that they had abandoned Urban Policy (Tallon, 2013). Their approach to regeneration was set out in the White Paper: 'Local Growth: Realising Every Place's Potential' (BIS, 2010), which set out a vision for the economy where business and communities were more responsible for their own futures (Lupton and Fitzgerald, 2015a). It has been argued that it brought in policy that reflected those of the 1980s, with an emphasis on physical development (Tallon, 2013). A key decision was to abolish the RDAs, as it was claimed that they did not represent a meaningful economic geography, and assets were transferred to the Local Authorities in the area where they were based. RDAs were thus replaced by Local Enterprise Partnerships (LEPs), with Local authorities assuming a key role but with at least half of the board drawn from the private sector and the chair set to be a business leader. It was expected that the LEPs would fund their own running costs, while supporting high growth businesses, infrastructure projects and strategic housing priorities. They represented the new infrastructure for the planning and delivery of regeneration.

LEPs are very much focused on economic growth, through utilising several different programmes and funding streams (Lupton and Fitzgerald, 2015b). The first of these, came through opportunity that arose for LEPs to apply for Enterprise Zones. These differ from the 1980s EZs as they were not about bringing back into use vacant and derelict land, but rather focused on supporting business growth. LEPs were also allowed to apply for a new Growing Places fund for small infrastructure projects, to unblock constraints to growth. These were made available on a loan basis, with repayments invested in new projects.

In addition to LEPs, the Coalition also initiated City Deals, which gave local authorities devolved powers from central government to attract private sector investment, in return for commitments to innovation and efficiency. Initially, these City Deals were made with the core cities, but later extended to a further twenty areas. They provide for a central-local commitment to funding and delivery for a 20-

30 year period, and are perceived by some authors as the key mechanism for advancing Urban Policy (Waite and Morgan, 2018). However, others have indicated that they are leading to uneven and inequitable outcomes across the UK (O'Brien and Pike, 2015).

The prominence of the private sector was further elevated through the Regional Growth Fund (RGF), which was targeted at areas where they had become too heavily reliant on the public sector for growth (Lupton and Fitzgerald, 2015b). RGF funds went directly to businesses rather than public bodies. The private sector have been critical of this fund, considering it to be slow and benefiting only a few businesses (Tallon, 2013). In addition, changes were introduced to the funding of local authorities to encourage growth. These include a gradual phased retention of local business rates, a bonus for new homes and tax incremental funding (TIF), which allows local authorities to use anticipated future tax receipts to support upfront investment in their local area. However, these approaches were criticised for being piecemeal (Heseltine, 2013).

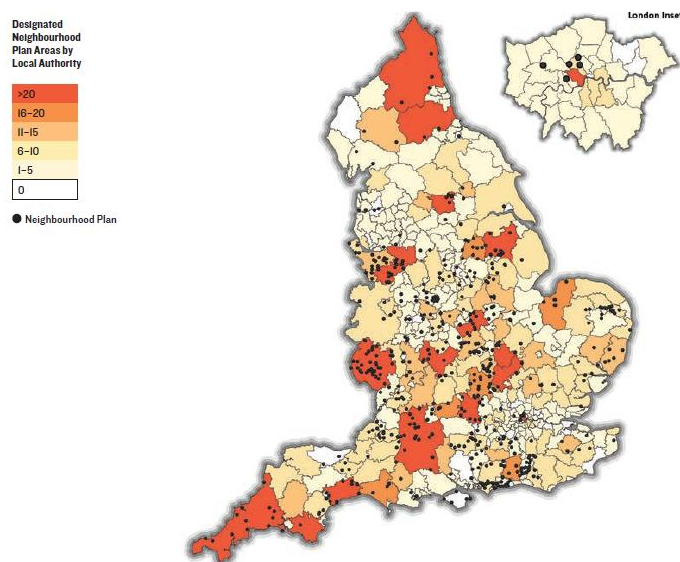
The Heseltine Review, which was published in 2013, made 89 wide ranging recommendations including the establishment of Local Growth Teams to replace RDAs and GORs, and asking LEPs to develop multi-year strategies with a single pot of un-ringfenced funding, as well as encouraging the establishment of combined authorities (HMT and BIS, 2013). In addition, a set of Local Growth Deals focused on major economic developments and negotiated with LEPs were announced (Lupton and Fitzgerald, 2015b).

None of the proposals in the Heseltine Review were focused on neighbourhood regeneration, but rather on promoting economic growth (Crisp, Pearson and Gore, 2015). This was a clear indication that the Coalition had stepped back from central responsibility for orchestrating regeneration at the local level. They also made the decision not to initiate any of the time-limited specific-area regeneration schemes, with the consequence that there was no longer a menu of activities to be pursued (Lupton and Fitzgerald, 2015a).

The approach to enabling communities to take a role in growth came through the Localism Act, 2011 and the resulting neighbourhood planning (NP). This enabled

local communities to produce a Neighbourhood Development Plan (NDP), affording them the opportunity to formulate their own statutory land use planning policies (Parker and Slater, 2017). However, some communities have found NP difficult to engage with (Gunn, Brooks and Vigar, 2015). There is also a requirement for these plans to fit within the existing planning hierarchy (Brownill, 2017), and the focus must be on encouraging more growth and development rather than less (LGA, 2013). In addition to neighbourhood planning, a number of other community rights were established. These include Community Right to Build Orders, which enable small scale, site specific developments; Community Right to Bid provides the opportunity to buy important buildings within their area if they come up for sale; Community Right to Reclaim Land gives communities the opportunity to request that unused publicly owned land and property is sold so that it can be brought back into reuse. (Brownill, 2017). The legitimacy of the groups compiling such plans have been questioned (Davoudi and Cowie, 2013). However, the geographic distribution (Map Y) of these Neighbourhood Plans calls into question the extent to which they will help alleviate spatial inequalities, as few are in post-industrial cities in the North and the Midlands.

Figure 4.1 Distribution of Neighbourhood Development Plan



Source: Lichfields analysis/LPA Websites/Planning Magazine/Forum for Neighbourhood Planning

Source: (Lichfields, 2018)

The latest attempts to regenerate places, take a slightly different approach from those previously pursued. They are still very much focussed on leveraging private

sector funding with minimal public funding behind them, but they now focus on giving areas a designation or status. The UK City of Culture builds on the successes of the European Capital of Culture Programme (UKCC, 2009) and designates a city for a year. Initially, there was no funding package to support its development, but this has been revised, and for the 2021 programme the city will receive an initial £3m, which is aimed at supporting events. The latest initiative is the designation of Heritage Action Zones, which aims to achieve economic growth through using the historic environment as a catalyst, providing a targeted response to the economic, social and environmental needs of a particular area. It provides funding particularly for the restoration of historically significant buildings, and the first of these were designated in 2017 and runs for a period of 5 years (Historic_England, 2017).

4.6 Conclusions

Although the evolution of regeneration policies and funding has seen a number of changes since 1945, leading to three broad phases – land use regulation, urban renaissance and austerity planning – there has been a significant amount of continuity. Local authorities have played a key role throughout, with only relatively minor changes to the mechanism for land use allocations at the local level. While during the late 1960s it was recognised that there needed to be greater synergy between economic and social priorities and land use, the real shift came in the 1980s. During this decade, the influence of Local Government was diluted, and private sector interests took centre stage. Where Councils were considered to slow progress, new development bodies and area-based initiatives were implemented to reduce their influence. The reduction in public sector funding since 2010, has led to an increase in competitive bidding for scarce resources and spatial targeting of development activities.

As highlighted in Chapter 2, section 1, the impact of regeneration activities are context specific, and thus how they are implemented and the outcomes they achieve, will depend on the prevailing economic conditions and institutional arrangements.

Chapter 5. Contextualising redundant spaces in Hull and Sunderland

5.1 Introduction

How a city develops over time and space, determines the nature of the areas within it. Therefore, understanding the history and geography of a place helps to contextualise the form and function of its urban environment. As a city evolves its size will often increase, encompassing a range of new functions that will require particular spaces. However, as the new urban form evolves, it is likely that some of the previous uses of land will no longer be required. These will either be utilised for other purposes or left to lie idle.

The purpose of this chapter is to outline how Hull and Sunderland have evolved over time and space, to provide an explanation of why redundant spaces have manifested themselves in these two cities. It will, in a contemporary context, illustrate the relative performance of both these cities to identify them as underperforming cities, with weak market characteristics. It then proceeds to outline some of the major interventions aimed at addressing redundant spaces, during the various phases of economic development and regeneration policies in the post-war period, with the emphasis on the 1970s to 2017. This will demonstrate how these interventions have helped to address spatial inequalities, in terms of creating employment and housing opportunities.

5.2 The evolution of Hull and Sunderland

Hull is a free-standing, medium-sized city situated on the north bank of the River Humber, and is divided in two by the River Hull. It is the most significant urban area in Humberside, but is considered of less importance than Leeds or York within the region. Using urban hierarchies, it could be considered a third-tier city (Hall, Marshall and Lowe, 2001) but has been described by (*Jonas et al., 2017*) as 'structurally disadvantaged' due to its employment make up. Its geographical location means that it is relatively isolated and therefore marginalised.

There is evidence that there was a settlement in the lower Hull valley during the Romano-British period, but the town was originally founded by monks in the second half of the 12th Century and was known as Wyke on Hull. It was one of a number of

new towns established in England to foster the growth of trade (Gurnham, 2011), and was purchased, along with Myton, by King Edward I in 1293 from the monks (Gerrard, 2010) . Under the Charter of 1299, it came to be known as Kingston upon Hull. The King was anxious to ensure that his new acquisition should grow, and ordered that a mint and an exchange should be set up there in 1300. However, the town did not grow as quickly as hoped and this was due to the small share of the profits of trade going to local merchants, suggesting a disconnection between the port and the town.

The continuing growth and prosperity of the town depended heavily on the River Hull, both for trade and concerns about flooding. By the end of the 15th century, Hull's fortunes had changed, with a decline in exports impacting on local merchants. Counter to this, was growth in coal exports and the emergence of a prosperous fishing industry, and the wealth this generated led to a development of craft guilds, which not only served the town but the surrounding villages. In the early Tudor period, trade continued to grow, making it the most valuable town on the east coast (Gurnham, 2011) – but this was curtailed when the cloth trades abandoned Hull for London. During the reign of Elizabeth I, England's international trade grew, and Hull's port benefitted from this, resulting in the expansion of the fishing industry and in 1578 the town was considered the best fish market in England. Despite the success of the port, it did little to stimulate growth in manufacturing.

Hull was at the very heart of the conflict in the English Civil War and the impact on trade was great. Again, this impact was short lived, as by the 1650s Hull was once again prospering and 'the Great Rebuilding' ensued, with the wealthy middle classes building grand houses to show off their wealth.

The industrial era of the 18th and 19th centuries had a profound impact on Hull, as it transformed from a medieval settlement into a town. It possessed three very large docks and was handling huge volumes of imports and exports from the surrounding counties, and their developing industries influenced what Hull exported. As the export and import trade increased, warehousing was developed – although very little was dealt with by local merchants.

The early 19th century saw a remarkable expansion of the Hull whaling industry, which had been in existence since the 16th century, and although it had had its peaks and troughs, it boomed in the early 1830s.

To accommodate the expansion of cargo in and out of the port, additional facilities were required, and the town came under pressure to develop a Legal Quay, and work began in 1775 on the new dock that opened in 1778. So rapid was the growth of trade that there were soon calls for another, and work started on another dock in 1803 – this one had the advantage of direct access from the Humber. Trade continued to grow after the disruption of the Napoleonic Wars, and a third dock was proposed to link the Humber Dock and the original dock. Work on this ‘Junction Dock’ began in 1827 and was completed in 1829.

As a result of these changes, new material processing and refining industries also developed, completely changing the character of the town and drawing ever more people into the area. These new industries included paint manufacture and other processing industries. But the largest industry in town remained shipbuilding, and by the end of the 18th century Hull built more ships than any other port in the UK besides London.

The growth of industrial employment led many people from the surrounding rural areas to move to Hull in search of work, and the population continued to grow. A new housing estate was built outside of the Old Town to the north of the Dock, predominantly for the town’s merchant’s and professional classes. This was followed by small estates further to the north in the 1820s and 1830s. These new residential areas and the attractiveness of some of the surrounding villages, led some merchants to leave the city; however, new attractive buildings were also being constructed in the Old Town, while working-class housing did not come in until the mid-1830s.

The industrial revolution caused a rapid expansion of the built-up area. Shipbuilding, oil and sugar refining, and animal foodstuffs processing industries had developed by the early 19th century. Increased trade and the emergence of Hull as a whaling and deep-sea fishing port, saw the development of 10 docks between 1778 and 1914. The second half of the 19th century was an intensive period of construction, with the

building of speculative working-class housing and the beginning of civic developments. Although the city expanded rapidly, the medieval street pattern of the Old Town remains largely intact. The end of the 19th century and the peak of Britain's position as a world power are usually regarded as the City's most prosperous period, although there were enormous disparities of wealth between rich and poor. In 1897, Hull was given city status and entered the new century as a prosperous, vibrant and self-confident community (Gerrard, 2010). The majority of the population were employed in the fishing industry or in the docks, which extended 10 miles along the River Humber and the River Hull. Two major docks had been constructed in the 1880s – St Andrew's and Alexandra – and a third King George Dock, open in 1914.

Hull suffered 82 air raids during the Second World War, with attacks concentrated on the port and its industrial centre due in part to its estuary location and proximity to mainland Europe. The result, was that Hull was the most severely damaged town or city in the country during the war (Cooper, 2017). In 1940, the railways were heavily bombed as part of a raid on the city's infrastructure and although the Alexandra, Victoria and King George Docks were attacked little damage was sustained. In 1941, the focus of raids shifted to the water infrastructure and surrounding industries, leading to damage of foundries, flour mills and oil refining facilities. Although the River Hull corridor, particularly the eastern and western areas, were the main focus of the attacks, the city's main retail areas along King Edward Street, Jameson Street and Prospect Street were largely destroyed. The area around Paragon Station and Ferensway was also badly damaged.

Sunderland is recognised as the second city of Tyne and Wear, being overshadowed by its near neighbour Newcastle, which is considered to be the regional capital of the North East and also one of the Core Cities. Sunderland does not fit into this category of city (Short and Fundingsland Tetlow, 2012). Drawing on the four structures framework developed by (Markusen, 1999), Sunderland can be described as a state anchored industrial district, or as a third-tier city (Hall, Marshall and Lowe, 2001). Considering the industrial structure of the area, it could be perceived as a structurally disadvantaged area (Jonas *et al.*, 2017). Nonetheless, all of these terms suggest that Sunderland occupies a more marginal position in the city hierarchy.

The town of Sunderland evolved from three small settlements located around the mouth of the River Wear: Monkwearmouth to the north which was established in 674 AD; Bishopwearmouth on the south bank in 930 AD; and a fishing village called Sunderland (now the East End) established in 1179 AD (Robson, 1980; Short and Fundingsland Tetlow, 2012). Sunderland is a product, not of the early industrial revolution, but rather the development of the technologies related to steel production and steam engineering in the late 19th century (Dennis, 1970).

Within the industrial era of 18th and 19th centuries, Sunderland expanded massively, with the port trading coal and salt (Author interview: Local Authority HAZ Coordinator - SP2, February 2018). The growth of coalmining, glass making and shipbuilding, led to the growth of the central area, through the absorption of Bishopwearmouth and Monkwearmouth around the river and the port (SCC, 2010).

Away from the river, the trading estate movement helped to diversify the industrial base during the interwar period, which reduced the town's dependency on shipbuilding and repairing; but compared to other metropolitan areas, it remained very reliant on heavy industry (Robson, 1980). However, much of this was represented by branch plants, presenting a signal of insecurity in the town's economic base, and illustrated that its 19th century characteristics continued to persist.

The Central Business District (CBD) that evolved from the original settlements, 'formed an effective nucleus around which growth has subsequently occurred' (Robson, 1980). However, the CBD's growth was characterised by functional segregation of areas. The river and sea fronts were used for industry, since the bulk of heavy industry was export orientated. Three main industrial areas can be identified: along both banks of the river; along the eastern seaboard to the south of the river mouth; and in the west of the town, especially Pallion.

Commercial and retail functions are segregated. The CBD was the dominant core area and a first-order retail centre, with second- and third-order centres strung along the main transport routes. Offices were almost exclusively located in an area in and around streets to the east of and parallel to the principal shopping streets in the CBD. The development of these areas represented a shift away from the original

core moving north to south, instead of the former position of east to west (Robson, 1980).

Although accessibility is an important factor influencing residential patterns, it is accompanied by a set of values and the desire to be in proximity to people of a particular kind (Robson, 1980). However, outside factors had an impact on residential patterns, as during the Second World War, Sunderland was subject to 251 bomb alerts, with the Shipyards and the Port being the main targets; however, they missed and hit civilian areas instead. This resulted in extensive damage to buildings and over 1,200 casualties suffered, with over 600 people killed or seriously injured. The collateral damage resulted in 1,000 houses being lost completely and 90% of the area's dwellings being damaged (Wear_Books, 1990).

Sunderland's decline during the late 20th century, as a consequence of structural changes in the international economy (Dennis, 1970), was in part due to characteristics particular to the area. Three of these were the most significant. The first was the industrial structure, dependent on coal mining, shipbuilding and the mechanical and electrical engineering sectors. In the face of global competition, these sectors were unable to compete. The second was its proximity to Newcastle, which had also suffered industrial decline, but due to its strength as a commercial and service centre became the regional hub of the post-industrial service economy (Cooper, 2009). The third was its geographical location and transport infrastructure. Although these were ideal for its role in coalmining and shipbuilding, they were not suitable for other types of commerce. It also meant that Sunderland was somewhat disconnected from the main north-south and east-west transport networks (Short and Fundingsland Tetlow, 2012).

The emergence of Hull and Sunderland as small settlements based around the River Humber and River Wear, respectively, shaped the nature of their urban structure and industrial development. The types of industries located in these two cities found it difficult to adapt in a globalizing world, as international competition led to relocation and restructuring particularly of manufacturing.

5.3 The performance of Hull and Sunderland

It is probably fair to say that both Hull and Sunderland have struggled to adapt to the new opportunities arising from the processes of globalization and deindustrialisation. This has affected their relative performance compared to other cities.

Figure 5.1 reveals the relative performance of cities in terms of employment and productivity growth. The general picture is that cities in the South outperform those in the North. Indeed, Hull and Sunderland perform very badly in terms of both indicators, with Hull underperforming compared with Sunderland. This suggests that both cities demonstrate weak market characteristics, especially when linked with their respective rankings on the Index of Multiple Deprivation, 2015, which places Hull 9th and Sunderland 38th - indicating that overall Hull is more deprived than Sunderland.

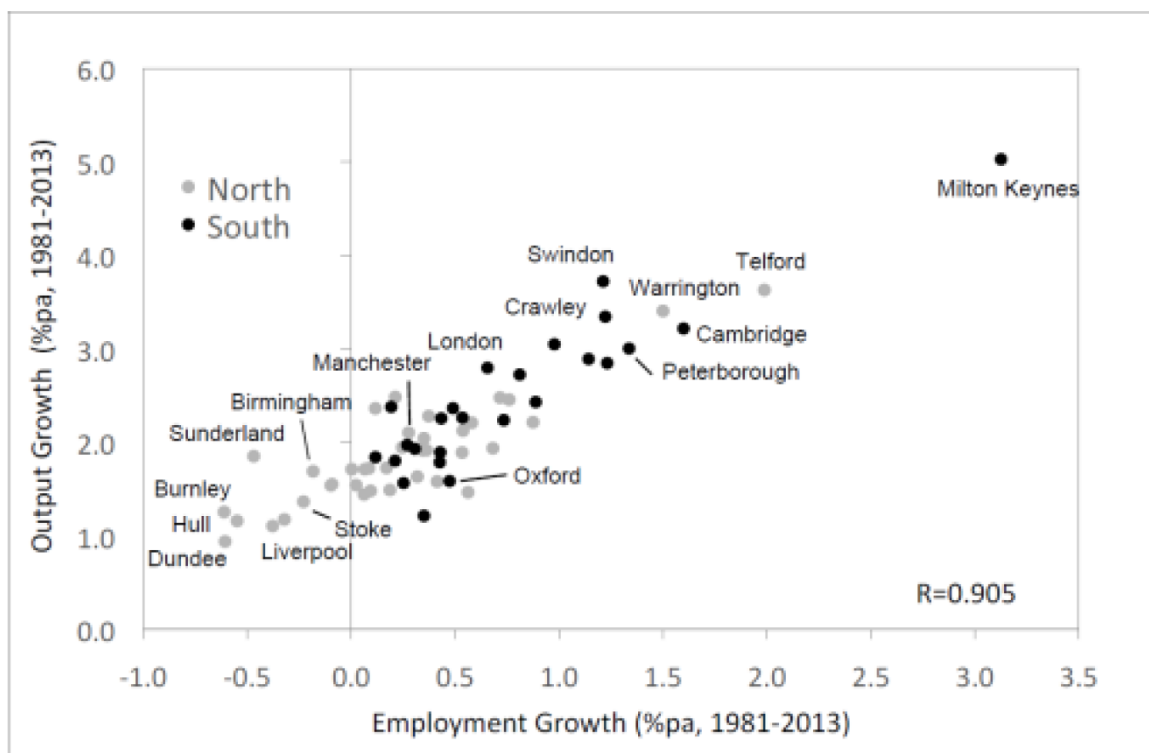


Figure 5-1 Average growth rates of output and employment across British cities, 1981-2013

Source: (Martin *et al.*, 2016b, p. 9)

Figure 5.2 below provides some insight into the cause of why Hull is lower down the rankings than Sunderland. The cities are ranked by ascending size of their

cumulative percentage point differential employment growth, and for each city the contributions the 'structural effect' and the 'city-specific' effect make to this total differential growth. Since these effects are calculated on a year-to-year basis, and cumulated progressively through time, they allow for the changing structural composition of a city's employment, and, correspondingly, changes in 'city-specific' characteristics and influences. The 'city-specific' component is often deemed the most interesting, since it is normally assumed to indicate the extent to which locally unique factors have caused growth or decline in a city's industries. More specifically, it captures the extent to which a city's industries have grown faster or slower than their national counterparts, and this difference is assumed to point to some local comparative advantage (or disadvantage). Two key features are immediately evident. First, for those that have lagged behind the national rate of employment growth, the structural effect is negative. Furthermore, the pattern of 'city-specific' effects is quite distinctive, being generally negative for the slower growing cities and positive for the fastest growing, thereby tending to reinforce the impact of the structural effect. The divergent growth paths of British cities appear to have been only partly due to differences in economic structure and structural change over time. Indeed, it would appear that differences in 'city-specific' factors have played as significant, or, in many instances, a greater role.

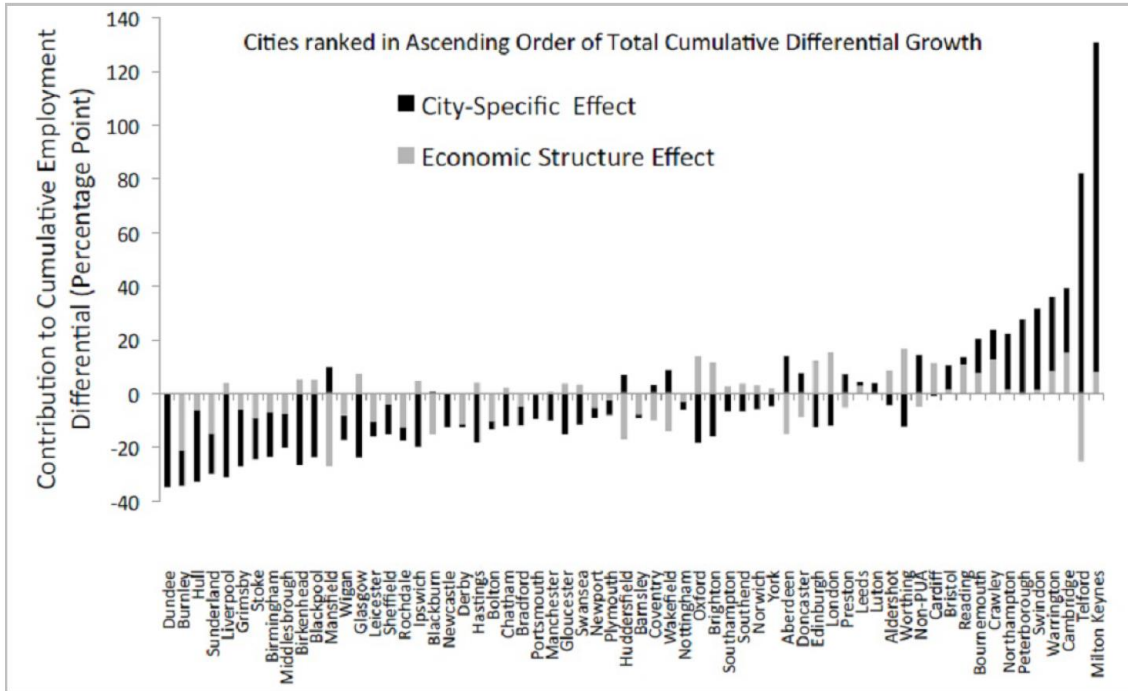


Figure 5-2 Dynamic shift-share decomposition of city cumulative differential employment growth, 1981-2013

Source:(Martin *et al.*, 2016b, p. 24)

Structural change has clearly had an impact on both cities, but the city-specific effects have been greater in Hull than in Sunderland. It is the influence of deindustrialisation on the 1970s that impacted on manufacturing, particularly shipbuilding and repairing, which were major industrial assets in both cities. Additionally, the demise of the fishing industry in Hull in the 1970s, could be viewed as a city-specific affect due to the scale of the operation within a UK context.

Although remaining a major North Sea port, from the 1970s onwards Hull experienced economic difficulties. In addition, as in many other European port cities, new technologies such as containerisation and automation, together with the reshaping of port flows and maritime geographies, triggered deindustrialisation on a massive scale. The loss, contraction and reconfiguration of Hull's industrial and maritime functions, led to socio-economic decline. This, unfortunately, was compounded by the city's relative geographical isolation, resulting in high levels of unemployment and deprivation. Such difficulties have fostered perceptions of the city

as being deeply linked with poverty, urban decay, and social and economic disadvantage.

The 1970s could well be described as Hull's 'dreadful decade', as the Cod War escalated further and ultimately led to the demise of Hull's fishing fleet in 1976. The major structural changes to the port and a rapid decline in fish landing, resulted in derelict docks and railway land. The resulting impact of this decline was high levels of unemployment and poverty. Many of the houses that the fishermen and their families lived in were considered sub-standard, and thus the City Council made efforts to improve them. 'Swathes of Victorian, cheaply built terraces fell to the wrecker's ball and the dislodged soulless high-rise buildings' (Gerrard, 2010) in the estates on the outskirts of the city. The housing in many of these areas has subsequently been discredited, due to the quality of the build and the materials used (Campbell, 2018).

The 1980s was a period of returning confidence. It saw the completion of the Tidal Surge Barrier across the mouth of the River Hull in 1980, protecting the Old Town from frequent flooding. During the same year, the Humber Bridge opened and the Northern Ferries to Rotterdam and Zeebrugge were introduced. In addition to this, it also remained the largest timber port in the UK. In 1983, the former Humber Dock was converted into the Hull Marina. The 1990s saw the construction of the Princes Quay Shopping centre created on top of 500 stilts over the former Princes Dock. To the West of the city, part of St Andrew's Dock was converted into a leisure park.

In 1992, Sunderland was granted City Status, but it has been claimed that 'Sunderland is not really a city, it is a line on a map'. There is no gravitational pull to the centre of the city to hold the various pit villages and post-war estates together as a recognisable urban entity. It may be called a city, but it does not work like one. It works like a town on a larger scale. The centre of Sunderland is a town centre not a city centre' (Author interview: Local Priest – SC2, March 2018).

Maybe one reason for this, could be that Sunderland was not considered to have participated in the country-wide rebirth of city centres, with still as yet unrealised regeneration sites located there, the most symbolic being the Vaux Brewery Site, which was viewed as being key to any vision of Sunderland re-born (Cooper, 2009).

The lack of progress in revitalising the city centre was considered to contribute to the dispersal of investment and economic activity away towards peripheral areas of the city, leaving an under powered city centre (SCC, 2010; Swinney and Carter, 2012).

The recovery process has been described as 'drawn out and 'unfinished business', with it beginning with inward investment by Nissan in 1984 (beginning operation in 1986) on the former airfield located on the A19 (Short and Fundingsland Tetlow, 2012). However, Nissan's success and its supply chain and Doxford International brought jobs to those areas, but the extent to which Sunderland benefits from this remains questionable. Other out of city centre developments including the Stadium of Light and the new aquatic centre are contributing to the vitality of the city. However, developments such as the regeneration of the Sunnyside area and the Echo 24 Building, as a gateway feature to the city when coming across the Wearmouth Bridge, have made little contribution.

A concern that 'there is no single street, square or other thoroughfare that is identifiable as the city centre' (Cooper, 2009). It could be argued that this has been addressed with the creation of Keel Square (Author interview: Local Authority Executive Director for Economy and Place – SP4, October 2018).

The Centre for Cities asserts that 'successful cities are built around cores of high-density business, employment and leisure activity which pull in services, commerce and people from a wide catchment area' (Cooper, 2009). Sunderland city centre has suffered both from new employment developing almost exclusively on out-of-town sites and from depressed economic activity in the urban core, following the running down of the city's traditional industries. This has been recognised by the City Council, who believe that vibrant city centres largely depend upon well-paid office workers using shops, restaurants and other facilities. Sunderland has not achieved the critical mass of facilities needed to attract significant numbers of shoppers from outside. Consequently, it has fewer shops and leisure facilities than it should (SCC, 2010). Interestingly, the city centre was not a major development priority, from a planning perspective, until 2013.

The housing geography of the city exacerbates urban cohesion problems, with residential areas widely spread away from, and with poor linkages to, the city centre

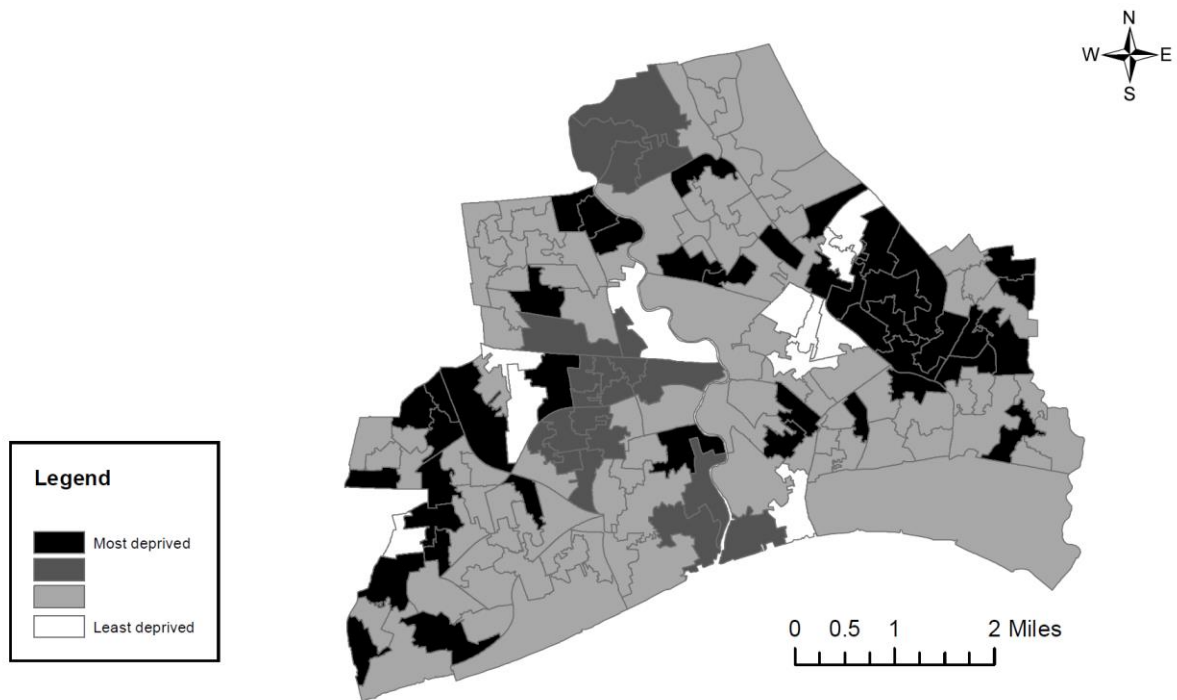
(Cooper, 2009). Although the Metro provides good links between Tyneside and central Sunderland, there is no link to the new employment areas that were developed in the west of the city at Doxford Park and Rainton Bridge (Cooper, 2009). Furthermore, there are also no connections to the East End and Hendon. Therefore, accessing employment opportunities in these areas is very car intensive. Indeed, the national road network in the area (A1M and A19) is located well away from the city centre, and the primary road network into Sunderland is largely radial and focuses on the city centre, but once there it difficult to access drop off points (Cooper, 2009) and parking is limited (Swinney and Carter, 2012).

5.4 Spatial inequalities in Hull and Sunderland

Using the Index of Multiple Deprivation 2015 can provide an indication of the spatial inequalities present in each city. Hull has a high concentration of deprivation in the east of the local authority area, particularly around Marfleet and Southcoates with pockets in other parts of the area. There are also concentrations of deprivation out to the west around St Andrew's Dock, Newington and Myton. To the North of the city, Bransholme and Orchard Park have areas of significant deprivation.

Figure 5-3 Spatial inequality in Hull, 2015

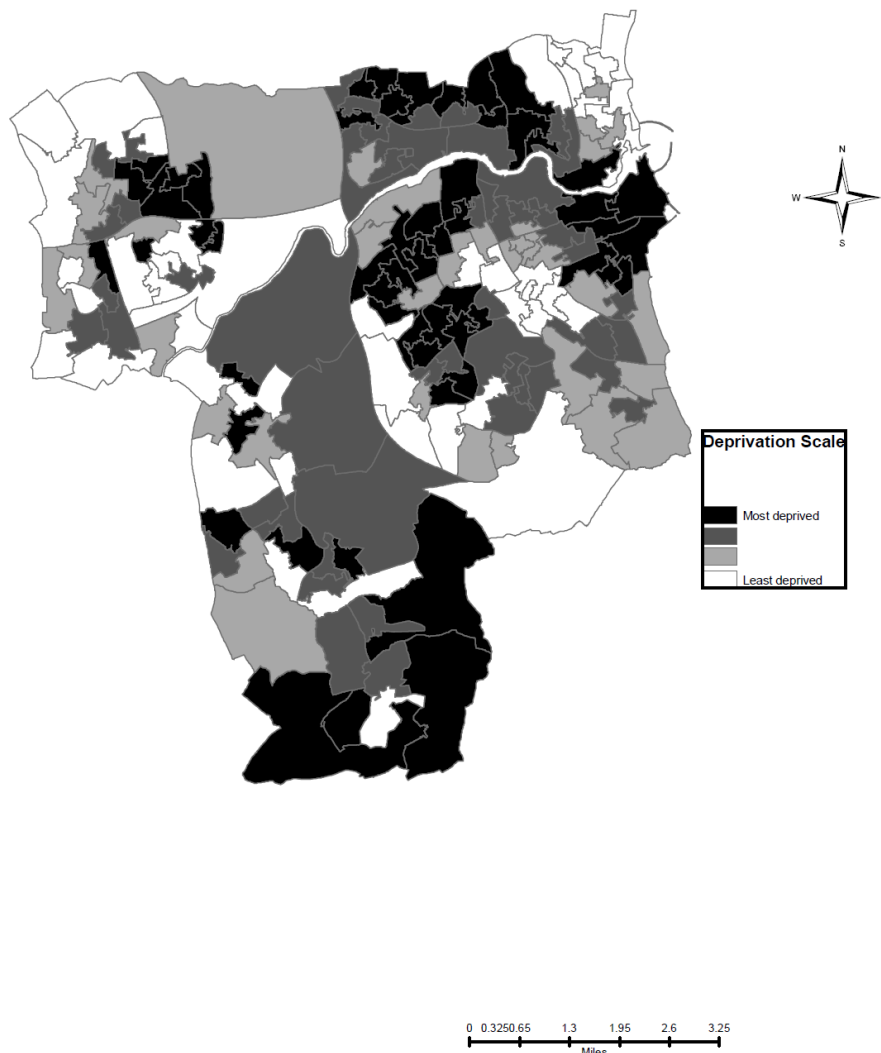
Distribution of spatial inequality in Hull



In Sunderland, the main areas of deprivation are the former coalfield areas in the southern part of the local authority in Hendon and the East End. Ford Estate and the Pallion areas suffer from high levels of deprivation, all of which are in Sunderland South. Southwick, Downhill and Marley Potts are the areas with the greatest concentration of deprivation in Sunderland North. While out to the west, Washington North has the highest levels of deprivation.

Figure 5-4 Spatial inequality in Sunderland, 2015

Distribution of spatial inequality in Sunderland



The spatial equity of each city clearly relates to its historical development and industrial structure. The urban form of each city developed to support the employment opportunities available, and as these diminished then pockets of deprivation emerged. These declining areas were unable to attract new opportunities, due to characteristics which deterred investors.

5.5 Land use value in Hull

From an economic perspective, the value of the land can be an asset, particularly once planning permission is in place or has been developed. Indeed, getting planning permission is an important factor for attracting investment or even for

development to become viable. However, the designations allocated to land can impact on land value. Employment land is of less economic value than housing land in most places; and this has been highlighted by data from the (MHCLG, 2018). In Hull, once land has planning permission for housing, its average value is £740,000 per hectare compared with an England average of £2,735,684. Industrial land in Hull is valued at £440,000 compared with an average of £482,000 for England.

As part of the Employment Land Review (NLP, 2014), assessments were made of development activity, with the majority found in North Hull, in particular Sutton Fields and the Western Corridor. Developments around the Docks and associated areas have accounted for a large proportion of this. The Enterprise Zone designation within this area and the development of a renewable energies cluster on various sites, has increased demand for land.

The Employment land review indicated that the office market was largely confined to the City Centre and Priory Park. The former was largely the result of speculative development in the 1970s (NLP, 2014), with demand coming principally from the legal and financial sectors. Although demand grew during the 1980s and 1990s, there was limited further development until the 2000s when a new office development was built at the Marina. Current demand for office space in the city centre is relatively low due in part to the limited availability of Grade A space. To turn this around, there needs to be an increase in the number of quality office spaces either through new developments or refurbishments. However, a number of former office spaces, particularly those vacated by the public sector from 2010 onwards, have been converted into apartments.

5.6 Land use value in Sunderland

As mentioned above, in Hull the designated use of the land can affect its value. In Sunderland, once land has planning permission for housing, its average value is £1,530,000 per hectare compared with an England average of £2,735,684, excluding London. Industrial land in Sunderland is valued at £180,000 per hectare compared with an estimated average value for England of £482,000 (MHCLG, 2018).

As part of the Employment Land Review (NLP, 2016), stakeholders were canvassed for their opinions and it was the industrial market that was viewed as particularly

strong in Sunderland, supported by growth in the automotive and advanced manufacturing and offshore engineering sectors. Key geographical concentrations of industrial activity include the area surrounding the Nissan Motor Manufacturing plant, industrial estates within Washington, Sunderland Enterprise Park, Southwick Industrial Estate, the Port of Sunderland (including Hendon Industrial Estate), and sites surrounding the City Centre (including Sheepfolds Industrial Estate and Pallion Industrial Estate). There was some evidence to suggest that under current market conditions, speculative industrial development has often required gap funding, and thus industrial development was limited to locations with established critical mass and easy access to the strategic highway network. There is a view that the amount of industrial land within the city is very limited (Author interview: Local Authority Executive Director for Economy and Place – SP4, October 2018).

Stakeholders also indicated that growth in the office market had largely been driven by call centre operations, utilities, financial and business services and to a lesser extent in terms of space requirements, the creative industries, software and digital industries. With a small city centre, office accommodation in Sunderland has been spread throughout the local authority, with clusters of activity in Sunderland Enterprise Park, Doxford Park, Washington, and Rainton Bridge Business Parks (NLP, 2016).

Land values in Hull and Sunderland vary considerably, with housing land being valued at less than half, on average, in Hull as compared with in Sunderland. Whereas for employment land, the reverse is true. These differences relate to the demand for these uses and the financial returns expected by developers in each of these cities.

5.7 Phases of regeneration in Hull and Sunderland

Tables 5-1 and 5-2 show the strategies and plans to address redundant spaces in Hull and Sunderland, and illustrate the target areas for intervention. Within Hull, despite there being a number of plans over the years, these appear to have been more aspirational than practical, as many of the projects are riddled with uncertainty. In Sunderland, there appears to have been less uncertainty, but nevertheless many of the actions outlined were not implemented.

Table 5-1 Strategies and plans for Hull

Priorities for Spatial Interventions	Humberside Structure Plan, 1976	Hull City Plan, 2000	The Renaissance of Hull City Centre, 2003	City Centre Action Plan, 2008	The City Plan, 2013	Hull Local Plan, 2016
Dock Area						
Humber Estuary						
Humber Quays						
East Hull Docklands						
East Bank and Blayde's Dock						
Hedon Haven						
West Hull Docklands					including Green Port	
City Centre						
River Hull Corridor						
Albion Square, Heart of City, Queens Gardens and the Learning Quarter						
The retail circuit and Quay West						
Fruit Market						
Peripheral Areas						
Sutton Fields						
Priory Park						
Kingswood						
Summer Groves						
North Hull Estate						
Thornton Area						
Bransholme						
Old Bilton Grange						
Gipsy Ville						
Derringham						
Due to start						
Completed						
Partially implemented						
Not implemented						
Development uncertain						

Source: Author's own

In Sunderland, the docks and the port have been prioritised for regeneration since the late 1970s, but most of the plans have only been partially implemented. Some progress has been made in terms of the north side of the River Wear, above the Queen Alexandra Bridge, but there is still more to be done. The further development of the Stadium Village could assist with this, but developments in this area have been piecemeal at best. Also, the opening of the Northern Spire, which is a road bridge across the River Wear, will make the south bank of the Wear, which has been pretty much ignored in terms of regeneration, more accessible for development, and the completion of the Strategic Transport Corridor will facilitate improved access to the Port, making it a more attractive proposition.

Over time, there has been a shift away from the city centre towards Washington and Doxford Park, with a major influence on this suburbanisation being the processes of deindustrialisation eroding employment in shipbuilding, coalmining and their associated industries, which left large tracts of land derelict. However, the focus has shifted back again, with this area now being a major focus for future development, especially in terms of housing.

It is probably correct to say that a number of areas have remained a priority for development in terms of plans, over a significant number of years, but their implementation has been partial at best. The north side of the River Wear has benefitted more than the South, particularly at Hylton, St Peter's and the Sea Front.

Table 5-2 Strategies and plans for Sunderland

Priorities for spatial intervention	Tyne & Wear Structure Plan, 1979	Sunderland: A Regeneration Strategy, 1988	Sunderland Urban Development Plan, 1998	Sunderland Urban Development Plan, 2007	Sunderland Economic Master Plan, 2010	Sunderland Core Strategy and Development Plan 2015 - 2033
City Centre						
Sunside*						
Crowtree Leisure Centre						
Holmside Triangle					including Town Park	
Vaux						
Galleys Gill						
Farringdon Row						
City Centre West					including MACQ	including the Minster Quarter
University - Chester Road Campus						
Sunderland Railway Station						
Keel Square						New Hotel Development
Peripheral Areas						
Sunderland Docks*		North Dock and Hudson Dock		The Port		Port EZ and Hendon
Doxford Park/Doxford International						
Washington				Philadelphia		
Ryhope						
Rainton Bridge						
North Hylton*						
Southwick Industrial Estate*						
Low Southwick*						
Sunderland Forge*						
Deptford*						
Groves*					Linked to new river crossing	
Former Pallion Shipyard*					Linked to new river crossing	
Stadium Village*			including Sheepfolds	including Sheepfolds	including Sheepfolds	Beacon of Light
Bonnars Field*						
Land at South Ryhope						
Cherry Knowle						
Land North of Burden Lane						
Chapplegarth						
Bonnarsfield/St Peters University Campus						
Leechmere Industrial Estate						
Land around Nissan						including IAMP
Sea Front Development						
Pennywell						
Due to start						
Completed						
Partially implemented						
Not implemented						
Development uncertain						

Source: Author's own

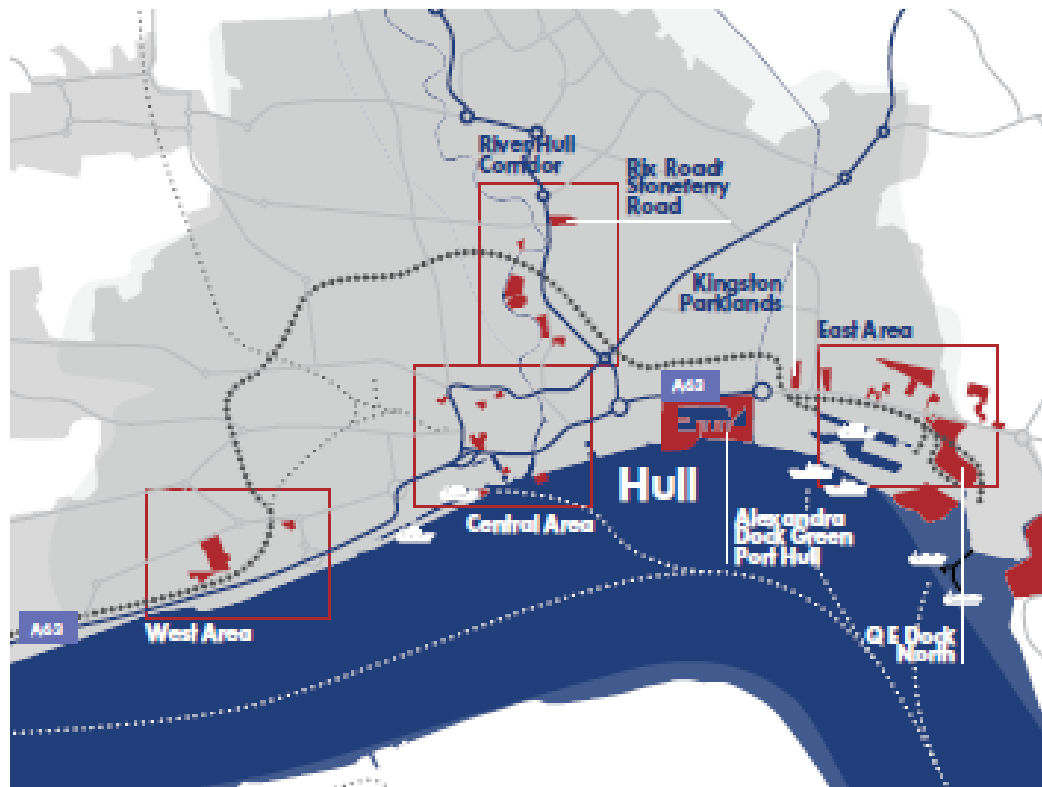
5.8 Spatial priorities for development and the location of redundant spaces in Sunderland and Hull, with an emphasis on case study sites.

The priorities for spatial interventions within Hull and Sunderland have evolved over time in line with national and local regeneration and development policy imperatives. In addition, these shifting priorities have been articulated by the Local Authorities within their Local Plans and other strategies coordinated by the Local Authorities. Both of these involve consultation with a wide range of stakeholders from business, policy organisations and the community. However, these processes tend to be facilitated by private sector consultants, drawing on what they consider to be good practice from elsewhere, presenting a range of options on behalf of the Local Authority. The tables synthesise the phases of spatial priorities as identified from a range of these plans and strategies.

In Hull, the city centre and the Dock areas have been constantly prioritised for development within statutory plans and regeneration strategies. However, it is only really since 2013 that major change has occurred in these areas. Prior to this, change was very piecemeal and did not really impact on the condition of the city.

However, the key driver for this shift has been the Hull City Plan (HCC, 2013), which set out a number of development projects to increase investment and employment across the city. These can be broadly grouped into the City Centre and three development corridors: the River Hull, Eastern and Western, which are approximately coterminous with the Enterprise Zones in Hull.

Figure 5-5 Strategic development corridors, Hull



Source: (Humber_LEP, 2015)

The areas earmarked as strategic development corridors encompass a significant proportion of the redundant spaces across the city, with the exception of those in the north of the area. The Myton Street/Bonus Arena area and the Fruit Market are within the City Centre/Central Area Zone, and are priority areas for investment in the City. The Lord Line site and the Rainbow Garden, however, do not lie in any investment priority areas.

In Sunderland, the docks and the port have been priority areas for regeneration since the late 1970s, but most of the plans have only been partially implemented. Some progress has been made in terms of the north side of the River Wear above the Queen Alexandra Bridge, but there is still more to be done. The further development of the Stadium Village could assist with this, but development in this area has been piecemeal at best. Also, the opening of the Northern Spire will make the south bank of the Wear, which has been pretty much ignored in terms of regeneration, more accessible for development, and the completion of the Strategic Transport Corridor will facilitate improved access to the Port, making it a more attractive proposition.

The Sunderland Economic Master Plan (SCC, 2010) set out a number of development priorities to improve the economic fortunes of the city, and focused planned investments along two corridors. These corridors broadly include the route between the transport interchange at Park Lane, the Vaux site, and between the university's City and Sir Tom Cowie campuses, St Peter's. Although at the time of the production of the strategy, they were relevant, such ideas are of their time (Author interview: Local Authority Executive Director of Economy and Place – SP4, October 2018).

Figure 5-6 Strategic development corridors, Sunderland



Source: (SCC, 2010)

However, these have been revised due in part to funding being made available in 2014 via the Sunderland and South Tyneside City Deal, which contained priorities for the Sunderland Strategic Transport Corridor and included the Northern Spire, the further development of the Port and the creation of an Advanced Manufacturing Park. Also, various studies undertaken by the Centre for Cities (Cooper, 2009; Swinney and Carter, 2012) have identified the poor performance of the city centre as a major reason for the poor economic performance of the city as a whole. The current priorities are firstly along the Strategic Transport Corridor, which will run from Nissan, including the Advance Manufacturing Park, along the A19 to the A1231, across the Northern Spire, along St Mary's Boulevard and onto the Port. However, this will require private investment to make them happen (Author interview: Local Authority Executive Director

for Economy and Place - SP4, October 2018), as the public sector has and will continue to install the necessary infrastructure to underpin their viability.

The second strategic corridor runs from the current Civic Centre site, through Park Lane and across to the Vaux site and along with a city centre investment strategy, which is currently being developed, and will be the main focus for public sector investment in the coming years (Author interview: Local Authority Executive Director for Economy and Place -SP4, October 2018).

Therefore, the Vaux Site, Northern Spire Development Area and the MACQ are all within priority development areas, and so efforts will be made by both public and private sectors to encourage development in these areas. The Former Paper Mill site at Hendon is outside of these priority areas, and there is a view that the development of this site is likely to be tied up with the expansion of the Port and the reuse of the land between it and the former paper mill site (Author interviews: Local Authority Executive Director for Economy and Place -SP4, October 2018 and Area Community Development Coordinator – SC4, December 2017).

The following sections outline the main interventions during the various stages of the evolution of economic and regeneration policies, from the post-war period until 2017.

5.9 Post-war period

Both Hull and Sunderland experienced major bombing during the Second World War, due in part to their shipbuilding activities. Within Hull, the main targets were the docks, railway infrastructure and other industrial districts (Starkey, 2017). In Sunderland, much of the focus of the bombing was on the shipyards (Dodds, 2011). Both cities were amongst the most heavily bombed in the country. However, because of the relatively imprecise nature of the bomb targeting equipment used by the Germans, many of the areas around the rivers were also hit. In Hull, 1,200 people were killed and more than 90% of the houses were either damaged or destroyed (Gurnham, 2011); by contrast, in Sunderland it is estimated that 267 people were killed, with 1,000 houses being destroyed and a further 3,000 damaged (Lambert, nk). This meant that both cities faced the major task of rebuilding their shattered urban fabric. Hull had commissioned a restructuring plan from Edwin Lutyen and Patrick Abercrombie for the redevelopment of the city centre before the end of the War (Jones, 1998). However, many of the

developments were considered to be overly ambitious and were shelved, whilst others were integrated into the Council's development plan, which was published in 1951.

In both cities, a major house building programme began in the 1950s – much of this was funded by the Local Authorities and so was predominantly council housing. Many of these new estates were on the outskirts of the cities, as it was believed that this offered a better environment to live. Within Hull, the new Council Estates were located in the North and East of the city and included Boothferry Estate, Priory Road, Grammar School Road, Spring Cottage, Longhill, New Bilton Grange, and Greatfield (HCC, 2010). In Sunderland, these were Hylton Redhouse, Pennywell, Springwell, and Thorney Close (Schlesinger, 1998). The post-war attempts to address the housing crisis was to construct 'prefabs'. These were intended to be temporary structures, lasting 10-15 years that were quick to construct and demolish (HCC, 2014).

The 1960s continued a focus on housebuilding as part of post-war restructuring with the construction of Orchard Park, North Bransholme, Bransholme, and Ings Estate in Hull (HCC, 2010); and Gilley Law and Doxford Park in Sunderland (Schlesinger, 1998). Numerous public buildings were also erected in Hull, which changed the appearance of the city centre (Gurnham, 2011). These included The College of Technology, an extension to the Central Library and Hull Royal Infirmary (Gurnham, 2011). Sunderland focused on the redevelopment of the Town Centre, with the construction of a pedestrianised shopping centre, whose brutalist architecture and layout made it unattractive and windswept (Dodds, 2011).

Much of the post-war period was concerned with housing and providing communities with the amenities to function effectively, and on rebuilding the social cohesion that had been heavily damaged during the war.

In Sunderland, strong international competition made it difficult for the shipyards to compete, and during the 1950s and 1960s shipyards either closed or merged, until in 1977 the industry was nationalised and many men lost their jobs (nk, nk). As with Hull, this led to high levels of unemployment and poverty. There were significant job losses in related industries, and in fact a third of all manufacturing job losses were caused by this (Callaghan, 1988).

Deindustrialisation in Hull and Sunderland has had a long-term impact on the health and wellbeing of the cities and their inhabitants.

5.10 New urban entrepreneurialism

To help reduce the impact of the closure of the shipyard, Sunderland was awarded two Enterprise Zones, one which covered the north bank of the River Wear, covering Hylton Riverside and Southwick. The second was designated at Doxford Park and was nothing to do with any of the industries affected by closure and had a private landowner (Author interview: National Planning Organisation Regional Policy Lead - NP3, January 2018). Because this area was essentially a greenfield site, its use did little to address redundant space in the city.

As part of the Urban Development Corporations initiative, Sunderland had areas designated as part of Tyne and Wear Development Corporation in 1987; while Hull had no such designation. The Sunderland urban development area was divided into four sections containing 17 development sites, including the largely undeveloped Hylton Parkland and the central industrial section, which contained the massive shipyard buildings, Wearmouth Colliery and numerous other industrial and commercial uses. Part of this area on the north bank of the River Wear, was developed into an enterprise park on the Enterprise Zone land. Other areas included the more open dock area between Wearmouth Bridge and the sea and close to the Town Centre, along with the coastal strip south of the docks which contains mainly industrial and port related uses. Unfortunately, these latter areas remained undeveloped after TWDCs ten-year life span. The contribution of TWDC in Sunderland occurred in two main areas: Hylton Riverside, where Sunderland Enterprise Park, including a retail development, was developed and arguably had a negative impact on the city centre with the enterprise park offering employment opportunities that had little relevance to those living on the surrounding council estates (Byrne, 1999). While the second area is St Peter's Riverside, which is made up of a number of individual sites and TWDC proposals were contrary to the Tyne and Wear Structure Plan. Sunderland North Dock became a marina with 415 dwellings, but the most important development was the establishment of the University of Sunderland's St Peter's Campus – although the location of the campus was questioned, as other sites were available which were more convenient for the existing University facilities (Byrne, 1999). The third part of

TWDCs development was the National Glass Centre, built to showcase the city's historical links with glass making (Short and Fundingsland Tetlow, 2012).

According to (Byrne, 1999), the long-term impact of TWDC was the deindustrialisation and sterilization of the River Wear. It also induced the displacement of students from the city centre to St Peter's Campus on the opposite side of the River Wear, which decreased spending in the city centre.

It has been argued that TWDC focused more on Newcastle than on Sunderland (Byrne, 1994), and put their efforts into developments that would bring the greatest financial return, rather than addressing the large tracts of former industrial land. Indeed, they left many of these undeveloped or partially developed by the time they ceased operation. Hull, on the other hand, did not have an equivalent Urban Development Corporation operating in their area.

The 1980s was a period of returning confidence in Hull. It saw the completion of the Tidal Surge Barrier across the mouth of the River Hull in 1980, protecting the Old Town from frequent flooding. During the same year, the Humber Bridge opened and of the Northern Ferries to Rotterdam and Zeebrugge were introduced. In addition to this, it also remained the largest timber port in the UK. In 1983, the former Humber Dock was converted into the Hull Marina, which provided office space and places for leisure. These developments were funded by the City Council via a range of income streams from central government, Council reserves and various European funding sources. Hull did not receive an Enterprise Zone or Urban Development Corporation Designation during this period.

5.11 The New Labour era – Neighbourhood renewal and the urban renaissance

Central Government continued to pursue private sector led development of unused and under-used areas through Urban Regeneration Companies. Hull Citybuild was established in 2002 to address property market failure and the physical challenge presented by the city centre (Genecon, 2008). They commissioned a master plan aimed at bringing about a renaissance of the city centre (RT&P, 2003). It consisted of five major projects, concentrated in five major development schemes – the Strategic Development Areas (SDAs):

- Albion Square, Heart of City, Queens Gardens and the Learning Quarter
- The retail circuit and Quay West
- Humber Quays
- Fruit Market
- East Bank and Blayde's Dock

The rationale for the selection of these areas, was that they would concentrate the limited resources available to the public sector to achieve the greatest feasible return in regeneration outcomes. In doing so, they hoped to overcome the identified supply-side deterrents to the market's performance, and deliver redevelopment in prominent locations on the scale needed to change the market's perception of opportunity in Hull (RT&P, 2003).

An evaluation of Hull Citybuild carried out in 2008 by GENECON, found that progress had been made on all of these SDAs but that there was still much to be done. Two developments were complete, which were Humber Quays offices, residential development and marina, and St Stephens retail and leisure development, along with an integrated transport interchange, which is part of the retail circuit. These provided high quality developments which the city centre was considered to be lacking. Although all of the SDAs had been progressing, they were subject to a range of delivery risks, including the ability of private sector partners to raise finance within the prevailing economic climate. Despite the positive evaluation, Hull Citybuild was replaced by Hull Forward later in 2008 (Smith and Garcia Ferrari, 2012)). Hull Forward, an economic development company, did not have its own strategy and so adopted the City Centre Master Plan, within the context of Yorkshire Forward's Regional Economic Strategy and focused on the redevelopment of the Fruit Market (Author interview: Local Authority HAZ Project Manager - HP3, July 2018). Although they commissioned a master plan for the Fruit Market area, which would have meant large scale demolition, Hull Forward ceased operation in 2010 before any work had begun on the redevelopment. From 2010, Hull City Council took a very piecemeal approach to a number of small-scale fragmented projects that had limited impact (Author interview: Economic Leadership Group Chair – HB1, September 2018) until in 2013 when the Hull City Plan (HCC, 2013) was produced, detailing a set of the priorities for development around two broad themes: Delivering Economic Growth and Delivering Fair Growth. The first of these will contribute to addressing redundant

spaces through the development of 'Energy City', particularly Green Port which focuses on developing the renewable energy sector around major investment by Siemens and its supply chain. Second, was the development of Destination Hull, where the City of Culture 2017 provided the impetus for the capital programme to support this ambition.

Sunderland Arc picked up the mantle from TWDC, although there was a five-year gap between the end of the UDC and the beginning of the URC. The Arc's boundary included the south bank of the River Wear from Claxheugh Rock in the west to the Port in the east. The area also included the Stadium of Light, St Peter's Campus and the National Glass Centre on the north bank of the River Wear.

Sunderland Arc's major success must be seen as the redevelopment of the Sunnyside area, the former heart of the city from Georgian times onwards, through the Sunnyside Partnership. This area has the largest concentration of the city's listed buildings and some major cultural facilities – such as the Museum and Winter Gardens – and benefited from £10m of investment into a range of projects aimed at changing how people think about this area. These included Sunnyside Gardens, an award-winning public garden in the centre of the area; the Place, an art and performance space; and the Northern Gallery for Contemporary Art (Short and Fundingsland Tetlow, 2012) The latter also housed a library, which had been co-located with the museum.

However, Sunnyside Gardens has failed to realise its potential, as a number of restaurants and bars have since closed, while some of the residential developments are now houses of multiple occupation (HMOs) and Hostels. The Northern Gallery for Contemporary Art has moved to the National Glass Centre, the library has returned to the museum and the building is now the office of the City Council's Children's Services Department.

As for the development of the River Wear sites, Port, Strategic Transport Corridor, Pallion Industrial Estate, Holmeside Triangle and Hendon Industrial Area, nothing manifested on these sites by the cessation of Sunderland Arc in 2010. Sunderland

City Council then picked up the challenge for the economic development of the city through the Sunderland Economic Master Plan (SCC, 2010).

Although there was some physical development aspects to neighbourhood renewal programs, the main focus was very much on people-based interventions. Physical interventions tended to concentrate on improvements to housing. Both Hull and Sunderland were allocated neighbourhood renewal funding and targeted this on neighbourhoods that had suffered long-term economic and social decline, with a continued emphasis on the Preston Road area in Hull and Hendon and the East End in Sunderland.

While it may be unfair to imply that these institutions failed to address unused and under-used redundant spaces; however, it is clear that they only partially developed the areas they were tasked to address, and many of the same areas remained priorities for redevelopment. The main issue seems to be the short-termism in institutional arrangements and funding, as many of these areas have significant constraints to development, often with contamination, poor infrastructure or accessibility issues that require significant time and financial resources to address.

5.12 The coalition government's approach

The coalition government's approach was very much a return to a 1980s property-led regeneration programme with an emphasis on economic growth, whilst attempting to reconcile the problems of austerity. This meant that Local Authorities had to be very specific about their priorities for regeneration, due to the reduction in funding available for these activities. Spending by Local Authorities fell by 14.3% between 2009/10 and 2017/18 across Britain as a whole, whilst in Hull the decrease was 23.1% and in Sunderland 21.1%. Planning and development services saw greatest impact (Centre_for_Cities, 2019, p. 17).

Within each city, the priorities remained within their strategic investment corridor as articulated through the Hull City Plan (HCC, 2013) and Sunderland Economic Master Plan (SCC, 2010), respectively. In Hull, this meant an emphasis on the Green Port and the development of the renewable energy sector, as well as on the city centre in preparation for the City of Culture in 2017. For Sunderland, there was an increased focus on the development of the Vaux and adjacent sites. Priority was also given to the

Stadium Village and Sunnyside, which was considered possible because much of the property was already owned by partners with an interest in the development of the city. Overall, these developments were very much focused on economic growth and were considered capable of attracting both private and public sector funding.

5.13 Conclusion

Hull and Sunderland both exhibit weak market conditions and have had difficulty in attracting investment into some parts of the cities. With the 2017 City of Culture award, Hull has experienced a bit of a renaissance. However, this is very much concentrated on the city centre, while areas with major infrastructure and remediation needs are not being addressed by Hull City Council as part of the Hull City Plan (HCC, 2013) and remain undeveloped. Sunderland has not had impetus from an event like the City of Culture, and clarity about development priorities beyond the Vaux Site, the International Advanced Manufacturing Park, the Port and a few housing sites, remain unclear. However, only the Vaux site will potentially have a positive impact on the dynamism of the city centre.

The issue of redundant space is a wicked problem (Head, 2008) for both cities, with numerous attempts to initiate market-led, but public sector enabled, developments overseen by a range of private sector-led institutions. However, at best these achieved only partial success and many of the sites have remained idle for many years. In recent years, Local Authority supported developments have made interventions into the market, enabling a small number of spaces to be reused. The speed of development and the success of these have varied, and would appear to depend on both the vision for the site and the implementation approach. Where redundant spaces are part of a wider regeneration framework, whether this is an area action plan, master plan or investment strategy, then reuse is more likely to occur.

The fact that Hull and Sunderland have struggled to overcome the impacts of deindustrialisation, is highlighted by their relatively poor economic performance. Despite various attempts at regenerating these cities, some of the more difficult to develop sites have remained redundant over many years. A contributing factor to this must be their weak market characteristics, which acts as a deterrent to private sector investors. Unless, that is, it is de-risked by the Local Authorities through provision of

enabling infrastructure or financial support. However, this enabling of private sector investment may mean that some areas in greatest need of reuse are ignored.

Chapter 6. The nature and extent of 'redundant' spaces in Hull and Sunderland

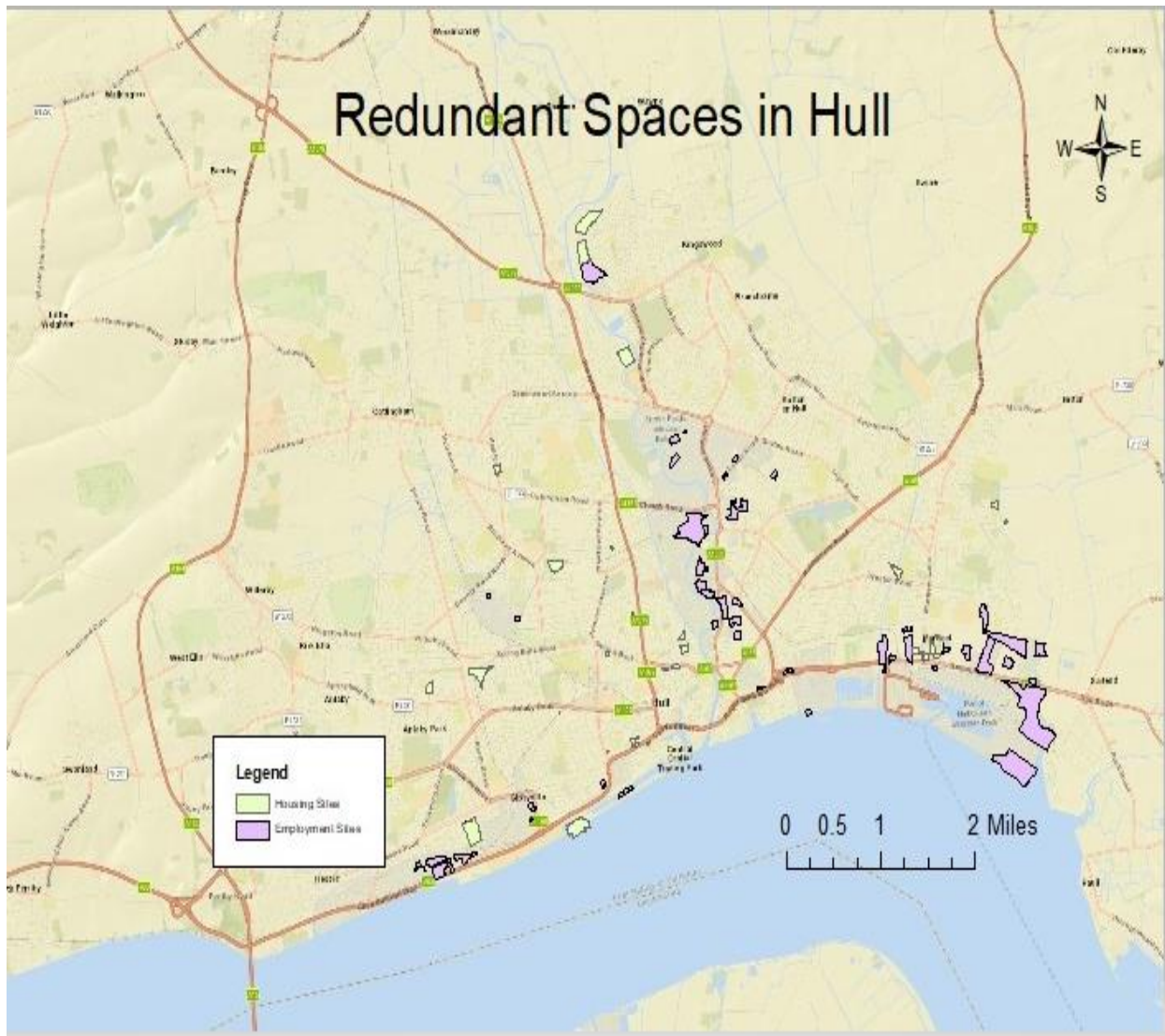
6.1 Introduction

The purpose of this chapter is to illustrate the variegated nature of redundant spaces within post-industrial cities, resulting from processes such as de-industrialisation and people's preferences for new residential types and locations. This chapter offers thick description and analysis using key concepts to make sense of the types of spaces identified using the Townscape analysis. The nature of these spaces can influence how they can be reused, and the impact that they can have on the surrounding area. Land and property of this type presents a challenge for older and financially distressed cities, such as Hull and Sunderland, particularly when public sector funding is constrained, and they struggle to attract private sector investment.

6.2 The extent of redundant spaces in Hull and Sunderland

Although redundant spaces share many of the characteristics of other types of vacant and derelict land, there are differences as outlined in Chapter 3. The figures below show the extent of redundant spaces in Hull and Sunderland, illustrating the location and type of space. Although (Schlappa and Neill, 2013) state that brownfield sites are often located in city centres, this appears not to be the case for redundant spaces in Hull and Sunderland.

Figure 6-1 Map of redundant spaces in Hull

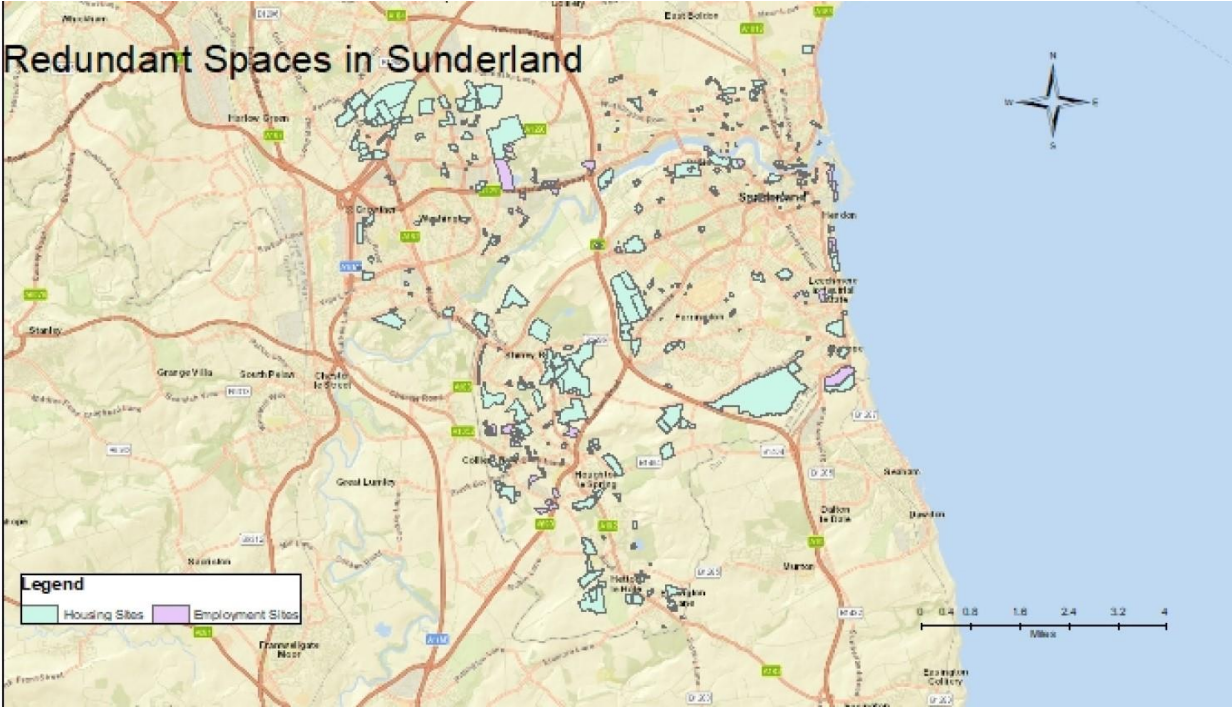


Source: Data was provided by Hull City Council from their strategic land availability assessments, 2016

Redundant space in Hull predominantly falls under the category of previous employment land, which has been allocated for the same use within the Local Plan. Much of this land and property is located near the banks of the River Hull and the River Humber, and the sites are relatively large. Redundant housing sites are much less common, with the main areas being concentrated around the city's housing priority

areas out towards Kingswood, Holderness Road Corridor and St Andrews. Most of these sites are relatively large, and are waiting for developers to take them forward.

Figure 6-2 Map of redundant spaces in Sunderland



Source: Data was provided by Sunderland City Council from their strategic land availability assessments, 2016

By contrast, the majority of redundant space in Sunderland is allocated for housing, with only pockets of employment land along the banks of the River Wear and the Coast. The housing sites vary considerably in size, from land with the capacity for 2,665 housing units on Burdon Lane in the former coalfields area of the city, and 1,125 housing units in Washington, to a site in the City Centre with the capacity for just two housing units. The very small sites are often 'in-fill' sites and therefore are difficult to attract major housing developers to utilise. They are usually taken up by small developers or builders; however, market conditions need to be positive to enable them to make a profit on their investment. Depending on what they propose to do on these small sites, planning permission can be an issue, which can further delay their utilisation.

Although there appears to be vacant spaces across the two cities, irrespective of the level of deprivation in the area, the neighbourhoods with the greatest number of sites

are in relatively more deprived areas in both. In Hull, the concentration of neighbourhoods with high numbers of sites are in relatively more deprived areas; but there is no similar pattern to the distribution in Sunderland. Where unused or underused spaces exist in these more deprived areas, they are more likely to become redundant due to limited interest from private developers, because of the perceptions of lower financial returns on investments. Also, they are unlikely to be a priority for Local Authority intervention unless they are within a strategic investment area. Local Authorities in Hull and Sunderland tend to want to support economic growth by leveraging private sector investment, and more deprived areas do not offer these opportunities.

The maps below show the spatial distribution of redundant spaces across Hull and Sunderland. In Hull, the concentrations of redundant spaces are to the west of the River Hull, reflecting the areas hardest hit by the decline of the fishing industry and deindustrialisation. In the east of the city, there also seems to be concentrations of such spaces, despite this area being more prosperous. The areas to the west of the River Hull reflect the changes to industry but also changes in residential patterns, resulting in large areas of housing land being cleared due to the decampment of communities by the City Council to other parts of the city.

Distribution of spatial inequality in Hull

with the location of redundant sites

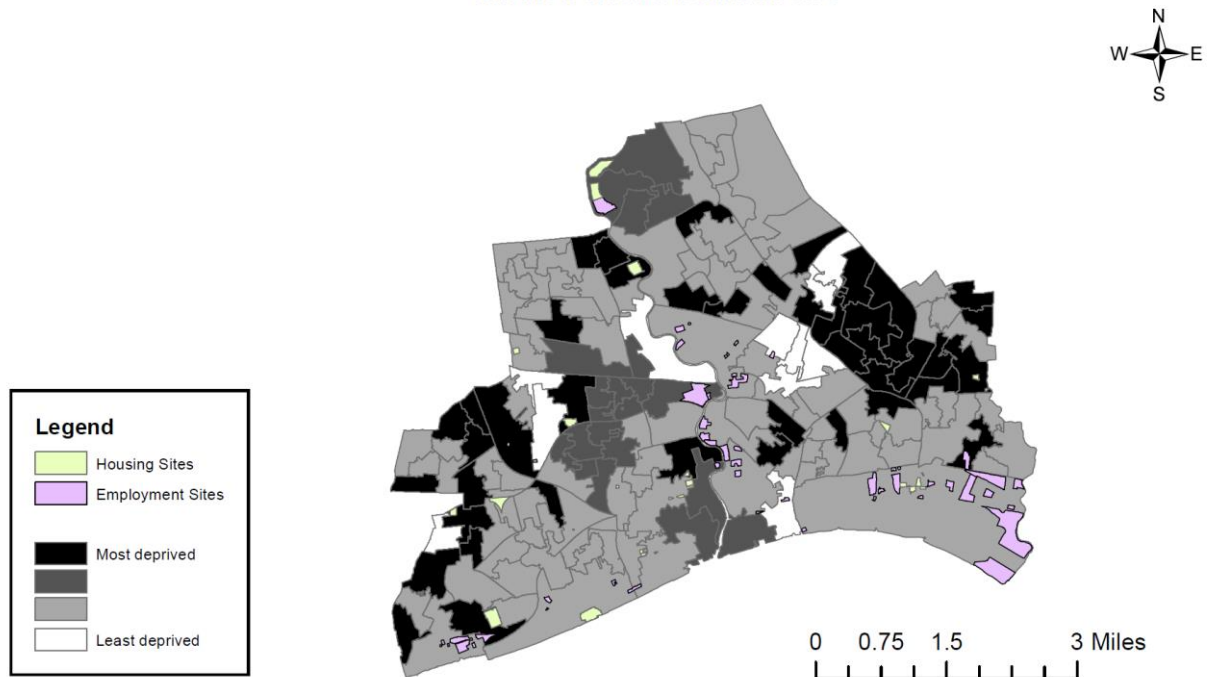


Figure 6.3

Source: Author's own using IMD 2015, and data provided by Hull City Council

In Sunderland, the main concentrations of redundant spaces are in Sunderland South around the river, which is the area where one of the main industries associated with the area, shipbuilding and repair, developed. Although much of the north bank of the river has been regenerated, the same is not true for the south bank. This may be due in part to the relative inaccessibility of the area in comparison to the north side, which has a direct link to the A19. Another area with relatively high concentrations of redundant space is the former coalfields, and they are associated with former industrial rather than residential or commercial areas of the city.

Distribution of spatial inequality in Sunderland

with the location of redundant sites

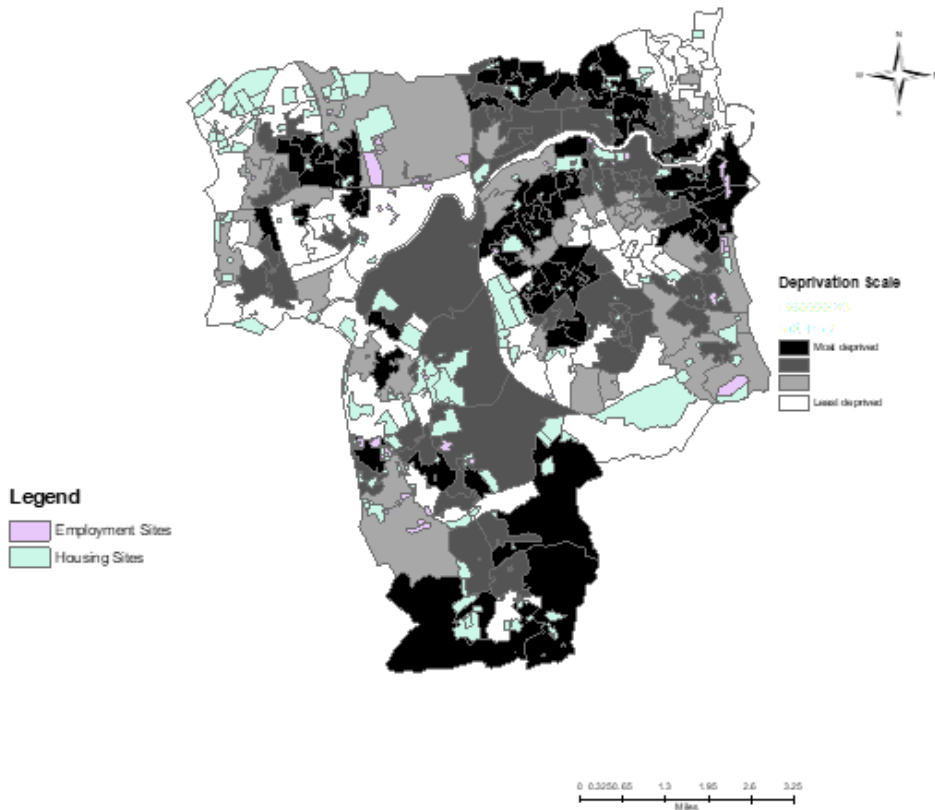


Figure 6.4

Source: Author's own using IMD 2015, and data provided by Sunderland City Council

6.3 Characteristics of areas with multiple redundant spaces

It is important to understand the nature of the specific socio-economic or environmental issues in areas with multiple redundant spaces, in order to determine the potential impact of these spaces on their neighbourhoods. This is not to say that there is a causal relationship between the existence of the spaces and the prevailing conditions. Rather, understanding the nature of the correlation can provide an indication of the type of interventions that could contribute to a more sustainable neighbourhood.

Within Hull, the areas with the highest concentrations of redundant spaces have relatively poorer environmental conditions and social wellbeing amongst its residents. However, the economic conditions are not discernibly different overall. In Sunderland, economic conditions appear to be relatively worse in areas with higher numbers of redundant spaces, as are environmental conditions. Social wellbeing does not strongly correlate with the existence of redundant spaces.

Although there are environmental concerns associated with multiple redundant spaces in both cities, economic and social wellbeing are less clearly correlated overall. It should be borne in mind that the Index of Multiple Deprivation (IMD) is a resident population-based measure, and so will only partially reflect the prevailing economic conditions that exist in a specific neighbourhood. Thus, it could be the case that the people who reside in an area have relatively low levels of employment, but that the number of employees working in the area are of a greater magnitude.

The negative impacts of redundant spaces can influence community well-being. As well as potential impacts on physical and mental health of local residents of the area (Author interviews: Area Community Development Coordinator - SC4, December 2017 and University Professor - HC3, April 2018), it can influence the general aesthetics of the neighbouring areas, leading to a negative social value. This can result in the wider area becoming derelict, causing depopulation and possible employment displacement (Author interview: Area Community Development Coordinator – SC4, December 2017).

Certain sites are of particular importance to the city's populations. The Lord Line site has an emotional significance for local people. The area has links to the former Hull fishing industry and the existence of the community in the nearby Hessel Road have families who were involved in this industry and may have lost loved ones in one of the trawler tragedies (Author interviews: Community Activist - HC1, April 2018 and Environmental Forum Coordinator - HP4, June 2018). Some of the local community want this site developed as a memorial to the former industry and fishermen, rather than as something that has no connection to the past.

The reach that the Vaux Brewery had across Sunderland, through its main site, numerous pubs and the contribution that they have made by funding significant events

and community groups, through their corporate social responsibility activities, means that many local people and businesses have very fond memories of this organisation (Author interview: Business Group Board Member – SB1, February 2018). Some former employees, or their family members, actually feel a sense of bereavement because of the loss (Author interview: Local Priest – SC2, March 2018). The City Council and its development partners decided to use the Vaux site and Keel Square as a memorial to the shipbuilding history of the city, which is seen as an important part of the city's history (Author interviews: Chief Executive of SPV Property Development Organisation - SB5, July 2017; Director of Community Engagement Organisation - SC1, January 2018 and Local Authority Planning and Regeneration Manager -SP1, February 2018). However, others feel that some memorial to the former brewery would have been more appropriate, possibly a statue of the horses that pulled the drays around the pubs in the city (Author interviews: Local Priest - SC2, March 2018; Area Community Development Coordinator - SC4, December 2017 and Local Authority HAZ Coordinator -SP2, February 2018).

Some sites are considered to have both culture and heritage value, and this is clearly true of the Heritage Action Zones in Hull and Sunderland – but there are other buildings that are considered in the same way. In Hull, for instance, the National Picture Theatre would fall into this category, as does the former Fire Station and the Synagogue in Sunderland. Although these sites although are currently or have recently been redundant, they possess value beyond the economic, often related to their history and/or the contribution that the activities that were performed in these areas made to the cities. Many of these relate to personal memories and experiences, which are difficult to quantify in financial or economic terms.

6.4 Types of land and property relating to the categorisation of types of redundant space in Hull and Sunderland.

Although there are a number of typologies to classify vacant land and property (Bowman and Pagano, 2004; Kim, Miller and Nowak, 2018; Newman *et al.*, 2016; Ramdewor, 2011), these tend to focus on a level of abstraction rather than provide workable examples to illuminate the type of spaces in an area. This section attempts to provide a more detailed consideration of the types of spaces that exist in Sunderland and Hull, using the townscape analysis tool discussed in chapter 3. Structural and

social changes within each city have resulted in various buildings and areas of land no longer being required for their original purpose. Drawing on the work of (Lee and Newman, 2019), the following categorisation is adopted as the framework of the Townscape Analysis (See Chapter 3).

Economic restructuring since the 1970s and the subsequent deindustrialisation in both Hull and Sunderland, resulted in the abandonment of large tracts of industrial land and property. Because of the importance of shipbuilding and repair in each city, a significant amount of this is located along the banks of the rivers. Although parts of these sites have been redeveloped, there are still areas that remain unused, which include the St Andrew's Dock, Lord Line site in Hull and land north of the Stadium Village in Sunderland.

The first image below shows the derelict buildings and land at St Andrew's Dock on the Lord Line Site. There are mixed feelings about this site, due to the prominence of the Lord Line building on the skyline on the main route into Hull on the A63. Some people believe it gives a wrong initial impression of the city (Author interviews: External Affairs Manager Hull and Humber Chamber of Commerce - HB2, September 2018 and Local Authority Planning Manager - HP2, June 2018), whilst others consider it to be an important part of Hull's industrial heritage that should be preserved (Author interviews: Environmental Forum Coordinator - HP4, June 2018 and Community Activist - HC1, April 2018). The pump house is listed for its industrial heritage but the Lord Line, which was the former Trawler owners' offices, is not; yet it has great sentimental value to the families of the former fishing community who live in the nearby neighbourhoods.

The dock gates have been concreted shut, making them unusable. Much of the land surrounding the buildings is unstable and warning signs have been installed to tell people not to enter the site. There are concerns that much of the land may be contaminated from its previous uses, and thus significant remediation work will be needed before the site can be developed. Indeed, Hull City Council estimates that around £10m would be needed to bring the site up to a state where it could be developed (Author interview: Local Authority Planning Manager – HP2, June 2018). This obviously acts as a constraint to investment from private developers, however, this site is not a priority for the City Council at present.

Figure 6-5 Lord Line site, St Andrew's Dock, Hull



Source: Author's photo taken on 20/1/17

The image below shows the redundant land north of the Stadium Village, which was a former shipyard on the River Wear and has been cleared of buildings. Much of the remaining land slopes down to the River, making it difficult to build on or utilise as recreational space.

Figure 6-6 Former shipyard, Sunderland



Source: Google Earth accessed on 11/4/19 – former shipyard area north of Stadium Village, Sunderland

An ongoing issue since the 1970s across both cities, has been factory closures. Again, this has been due to economic restructuring leading to the decline of some industries, such as engineering and manufacturing. The first photograph shows the former Northern Diver's Factory on the east bank of the River Hull, which was established in 1963 and relocated from this site in 1994. The company offered underwater Civil Engineering services from this Buoy Shed. Much of the area is derelict land, some of which is being used as car parking, but the ground is very rough and there are no marked parking bays. Although much work has taken place to develop the land and property on the other side of the river, with the development of the Museum Quarter, little has happened on this side, rendering much of it redundant. Despite there being plenty of land to develop on this side of the River Hull, it is not currently a development priority for the city. Part of the reason for this, is due to some of the land being considered to be blancmange-like, and so will be a real challenge to construct anything of significance there (Author interview: Local Authority HAZ Project Manager - HP3, July 2018).

Figure 6-7 Former Northern Diver factory



Source: Author's photo taken 26/7/17

The photograph below shows a former factory unit in the Pallion area of Sunderland, which closed in the mid-1990s and has remained derelict ever since. It has been subjected to various episodes of arson and other vandalism. There are no immediate plans to do anything with this site, and many of the industrial buildings around this location are also empty, but less derelict. However, this site is nestled within a residential area, and it is surrounded by houses and local retail units, making access to the site relatively difficult. The neighbourhood in this area is relatively deprived, mainly due to the loss of employment in the area, and the low economic activity has an important bearing on the housing conditions.

Figure 6-8 Former factory unit, Sunderland



Source: Author photo taken on 21/4/17 former factory building in Pallion, Sunderland.

Unless these areas are designated as regeneration areas, and developers and employers are able to obtain incentives to locate or build there through improved infrastructure, financial incentives or simplified planning requirements, then attracting investment is likely to prove very challenging. Alternatively, if adjacent areas are being developed then these specific locations could be more attractive. However, there are currently no plans to enhance the environment or community facilities in this area.

Figure 6-9 Former Vaux Brewery site, Sunderland



Source: <https://www.thenorthernecho.co.uk/business/15829334.carillion-collapse-halts-work-on-vaux-breweries-site-council-bosses-say-scheme-will-be-delivered-as-soon-as-possible/> accessed 15/4/19

Having ceased operation in 1999, Vaux Brewery was a major institution within Sunderland, not just because of the main brewery site itself, but also numerous public houses within many of the neighbourhoods around the City. This site was cleared very quickly after its closure to ensure that it was not bought by another operator and reopened as a brewery, as it was viewed as a site with major development potential (Author interview: Local Authority Principal Landscape Architect – SP3, January 2018). The site is approximately 5.86ha and is designated as a strategic employment site within the Local Plan. Since the site is located in the City Centre, this should make it attractive to investors, but because it is relatively large it may prove more difficult to reuse (Longo and Campbell, 2017).

Public sector restructuring, particularly following the reduction in public sector funding after the global financial crisis in 2007/8, led to the abandonment of public sector buildings. With the publication of the RICS *Public Sector Asset Management Guidelines* (RICS, 2008) and the *Public Asset Management Framework* (DCLG, 2008), the focus shifted to aligning public sector assets with the strategic and operational priorities of these organisations; and cost saving considerations were becoming

increasingly important to the management of the public sector's physical asset base. However, instead of merely viewing these physical structures as a cost to be reduced, they could be used to generate an asset stream over the long term, underpinning the financial base of the public authorities to support future investments (Detter and Fölster, 2017). Although the austerity measures that were introduced from 2010 made this more prominent, there were earlier phases of restructuring; however, neither Hull nor Sunderland have capitalised on their local assets.

There are various buildings across Hull that have been left empty, as a result of public sector restructuring due to austerity measures. One such building is the old ambulance station in the Myton Street area. This building, which is on Osborne Street Hull, was opened in 1958 as a purpose-built facility and closed in December 2009, with the operational activities being transferred to two new smaller stations elsewhere in Hull. This building was one of many in this part of the city that was unused and further reinforced the feeling of this being the 'no-go area' of the city centre (Author interview: Environmental Forum Coordinator - HP4, June 2018). It was demolished in 2016 and now the site forms part of the area where the Bonus Arena has been built, although many of the other buildings in the area remain derelict.

Figure 6-10 Former Ambulance Station, Hull



Source: Draft Myton Street Development Brief, 2014

The Fire Station on High Street West in Sunderland opened in [1907](#) and closed in 1992, laying unused for 22 years. The technological advancements in the fire services made this station unfit for contemporary use, and so its functions were transferred to other stations across the city. However, there are plans to redevelop this building into the heart of a new music, arts and cultural quarter within the city. A local artist was commissioned to paint panels on the windows of the building to make it more attractive to passers-by. Although this improved its appearance, it did nothing to stimulate investment in the surrounding areas, which were becoming increasingly rundown.

Figure 6.10



Source: The Fire Station <https://co-curate.ncl.ac.uk/old-fire-station-sunderland/> accessed 8/12/21

The Police Station in Queens Gardens opened in the 1960s, and provided the central police station for Hull until 2013. The building stood virtually empty until 2016, when it was bought by a local property developer for conversion into apartments. However, it was not until July 2017 that when work began. This is an element of a larger scale redevelopment of Queens Gardens, as part of the Maritime City plans (Hull Daily Mail

24/4/19). Prior to its purchase and before the redevelopment began, the empty building cast a shadow over the Gardens both physically and metaphorically, with limited pedestrian traffic passing the building and the majority of people choosing to walk on the other side of the Gardens (Author observation January 2017).

Figure 6-11 Former Police Station, Hull



Source: Queens Gardens Police Station Hull from www.pai.uk.com/News/sold-queens-gardens-police-station-hull accessed on 11/4/19

The Police and Crime Commissioner for Humberside was quoted as saying:

The former Queens Gardens Police Station has been surplus to requirements for some time, the sale will provide a welcome boost into the capital budget and represents good value in the current market, along with the regeneration of a significant building in the city centre. (pai.uk.com, 2016).

This statement highlights the importance of disposing of surplus assets to attempt to reduce the impact of public sector funding cuts.

The Gill Bridge Police Station, which was previously the main location within Sunderland with smaller satellite stations across the city, closed in 2015. It had been decanting functions to a new police station on the other side of the river since 1985, reducing occupancy in the building and footfall in the general area. The sale of the Police Station was agreed in 2017 and redevelopment began in 2018, after the City Council applied for a change of use from its original purpose to business and leisure use.



Figure 6-12 Former Gill Bridge Police Station, Sunderland

Source: <https://wearsideonline.com/gillbridge-police-station-close/> accessed

Although both Hull and Sunderland have experienced the closure of their city centre Police Stations, the Queens Garden Station was purchased by a private developer, whilst Gill Bridge was initially purchased by Sunderland City Council, that then had to build a new access road and re-site a substation because of other developments taking place in the vicinity, before a private sector buyer would agree to the eventual purchase of the site.

Across both cities, there has been significant restructuring of the Schools estate since the mid-2000s. Some buildings were in desperate need of repair, and some were no longer fit for purpose due to their size or the facilities that they had. This affected both primary and secondary schools in each city and resulted in a number of former school sites becoming available for redevelopment. Because of their proximity to large population centres, they have proved popular with housing developers, particularly as access to the sites tends to be relatively straight forward and their previous uses do not tend to require much remediation.

The sheer size of public sector buildings and the amount of public interaction that takes place within them, means that once they become unused or are utilised to a lesser extent it has an impact on the surrounding areas. This is in part due to the reduced footfall from the public, but also the spending power of those previously employed in these services, which may negatively impact on other businesses in the area.

The public sectors have been major employers in both Hull and Sunderland, and as such occupied a significant number of often large-scale office buildings. Once employment in these sectors declined and the use of the buildings was rationalised, they then stood empty for long periods of time – as alternative uses were hard to find given the weakness of the office-based employment sectors in both cities.

Buildings that have been utilised by the public can cease to be used for various reasons and remain in this state for long periods of time. One of the most extreme examples must be the National Picture Theatre on Beverley Road, Hull. This building was bombed in 1941 during a bombing raid on the Docks. The interior of the building was completely destroyed by the bombing, but remarkably the facade survived and still survives to this day, including fragments of the Foyer and vestibule behind it (<http://www.arthurlloyd.co.uk/Hull/NationalPictureTheatreHull.htm> accessed 15/4/19).

According to Historic England, the Cinema was first listed as Grade II in 2007 but nothing happened to it. Although there are now plans to turn this site into a memorial due to the fact that it is a reminder of what happened during the Second World War and the importance of the cinema at that time, no developments have begun as of December 2018.

Figure 6-13 National Picture Theatre, Hull



Source: Hull Blitz Cinema could become memorial site [https://www.bbc.co.uk/news/uk-england-humber- 44942592](https://www.bbc.co.uk/news/uk-england-humber-44942592) 24/7/18 accessed 15/4/19.

Despite the Grade II Listing status of the front of the building, the inside is completely overgrown and has flora higher than the roof, as shown in the photograph above. In its current state, it blights the nearby buildings, with a number of them closed and becoming derelict. Located less than a mile from the main campus of Hull University, Beverley Road is popular with students and many of the businesses along that stretch cater to their demands and so tend not to be high end establishments.

Sunderland Synagogue was listed in 1999 due to its architectural features and to safeguard it from demolition, and the building was closed for worship in March 2006, reflecting the dissipation of the once strong Jewish community in Sunderland. Although, it continued to be used for a further two years for storage and offices by the Jewish community, it has stood empty since 2008.

Figure 6-14 Former Synagogue, Sunderland



Source: Sunderland Synagogue <http://www.jewishheritage.org> accessed 15/4/19

The building was sold in 2010 and the new owner wanted to turn it into luxury apartments, but the planning application was refused on the grounds that it would be an inappropriate conversion. Also, the Council wish to preserve the city's cultural heritage and this building is seen as an important component of this.

When the North Hull Estate was built in the 1920s and 1930s, many of the council houses were developed with very long gardens. However, in the 1970s a number of people considered these to be too big and unmanageable, and approached the Local Authority to address the problem. The Council's response was to bring forward the bottom boundary fences to shorten the gardens, creating residual space between the bottom fences of each garden. Over time this space became forgotten.

The Housing Act 1988 made provision for the establishment of six Housing Action Trusts (HATs) and the first of these was established in North Hull Estate in 1991 and responsibility for the housing stock in that area transferred from the Local Authority to the HAT.

In 1995, a local resident contacted the HAT to complain about children climbing over their bottom garden fence, and to say that they did not know where they were coming from. The HAT dispatched an officer to investigate and found that there was access to the space beyond the garden fences through some overgrown bushes. The space was a good size, heavily overgrown and full of rubbish, which people had dumped over their garden fences (Author interview: Community Asset Coordinator, Rainbow Community Garden - HC2, July 2017). The images below show the early stages in the development of the Rainbow Community Garden with soil and paths being laid.

Figure 6-15 Initial phase of the Rainbow Garden, Hull



Source: Rainbow Garden

Derelict buildings - 170-175 High Street West, Sunderland

These buildings are where the Binns department store started and operated for forty years before its relocation to Fawcett Street. The buildings were bought, and the owner had intended to redevelop them into apartments, but this did not happen. They stood derelict for many years, with deteriorating structure and greenery growing out of the roof and from the guttering. Because of their physical condition,

commercial development was unlikely unless it was possible to demolish and then rebuild them. However, because of its local historical significance this was considered undesirable and planning permission could not be obtained (Author interview: Local Authority HAZ Coordinator – SP2, February 2018). The owners were unable to develop the buildings and so they sold them to the City Council, who in turn gifted them to Tyne and Wear Buildings Trust to restore them. They are in the process of reconstructing the buildings and in one of the more habitable parts a local business has moved in and are offering a range of events and facilities for the local community.

Figure 6.16 170-175 High Street West



Source: <https://historicengland.org.uk/get-involved/visit/walking-tours/sunderland-heritage-walk/170-175-high-street-west/> accessed 8/12/21

When some large developments take place, not all the land is utilized – this is illustrated by the residual grassed area in front of Great Thornton Street Flats. Located in one of Hull’s most deprived areas, when combined with reports of huge power cuts, drug dealing and terrified children (Hull Daily Mail, 18 November 2019), generates this grim picture is unlikely to attract private developers.

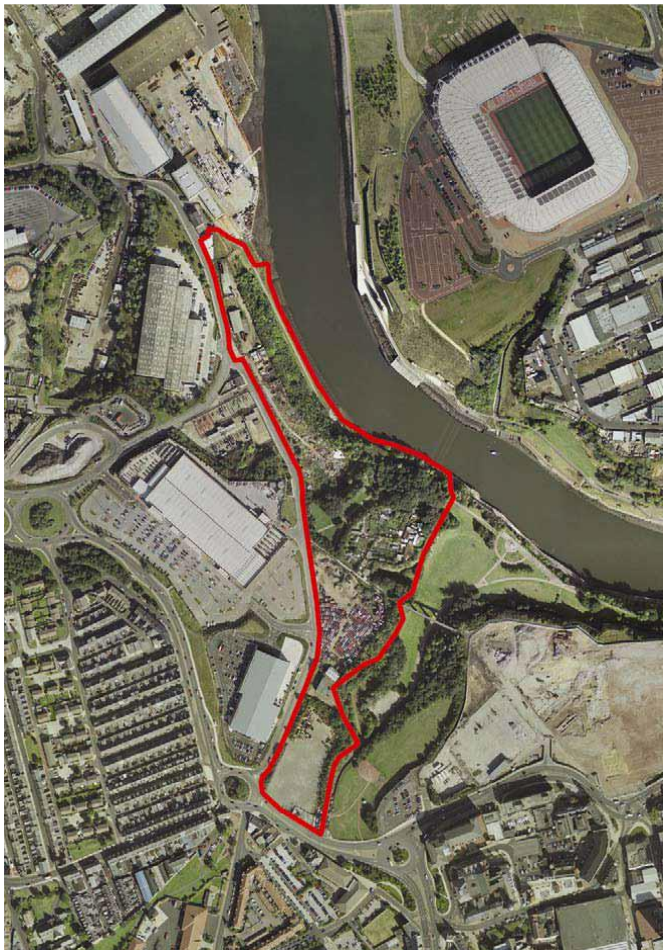
Figure 6-17 Great Thornton Street Flats



Source: Hull Daily Mail – August 2018

Another example of remnant space is Farrington Row in Sunderland. Although the site has been cleared of its former industrial and commercial uses and outline planning permission was granted in 2004, the site remains unused. The ambition for this site is for mixed use development, including housing.

Figure 6-18 Farrington Row, Sunderland



Source: Farrington Row Development Framework, 2016.

The land use designations within Local Plans influence how spaces can be reused. The designations tend to be either housing or employment focused, with an increased emphasis on housing.

The restructuring of communities can result in the demolition of housing, which can lead to significant areas of redundant space. In buoyant economies where there is a high demand for new housing, many of these sites will be snapped up by private sector housing developers for immediate development or as an asset to landbank for future utilisation. However, in areas of relatively low housing demand these sites can lie idle for many years, especially if they are considered not to be of an appropriate size or are difficult to access, which has been the case in both Hull and Sunderland.

Housing area redevelopment – Preston Road, Hull and Pennywell, Sunderland.

The Preston Road Regeneration Area is one of the biggest housing regeneration projects in Hull, and will result in 2,013 dwellings by 2032 (GVA, 2009)(GVA, 2009). Many of the houses in the area are of a non-traditional council house design and have a number of issues, including structural faults and levels of thermal efficiency. The layout of the estate, with numerous alleyways and poor vehicular access, contributes to a number of social issues including crime, mobility challenges and issues for service vehicle access (GVA, 2009; HCC, 2017).

Figure 6-19 Preston Road Estate, Hull



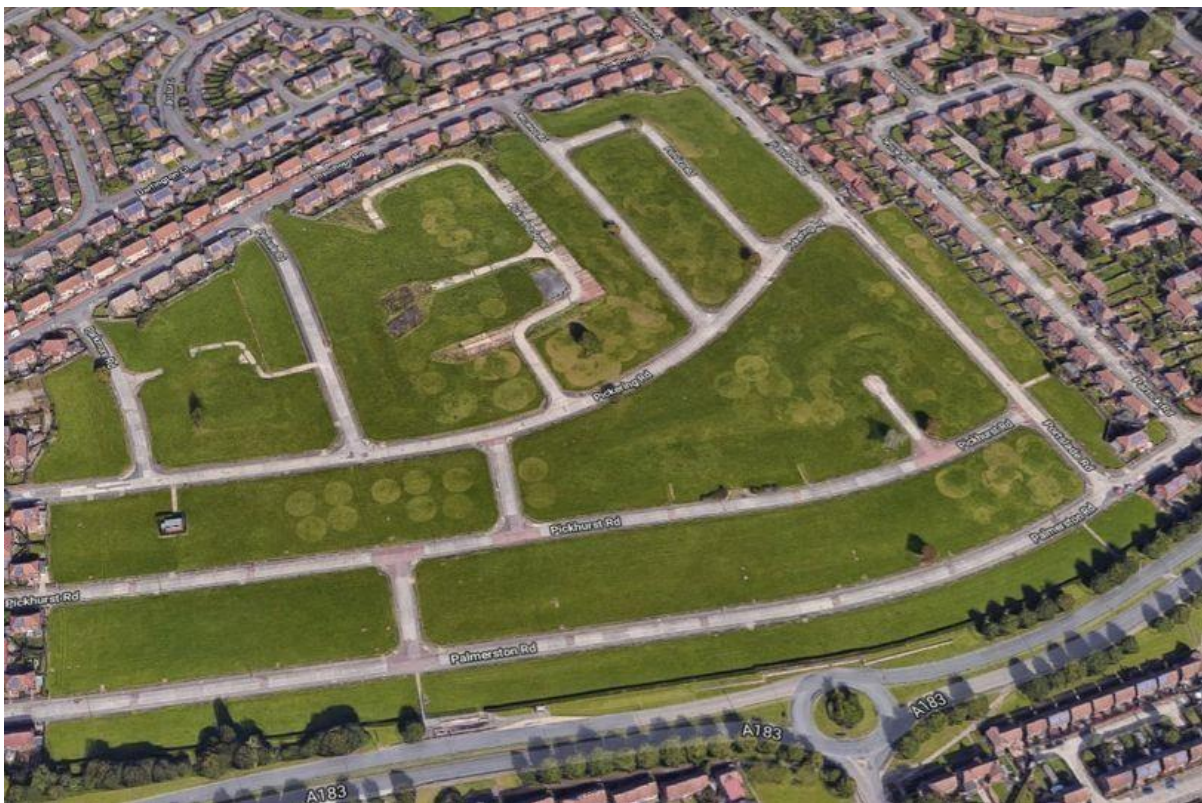
Source: Hull Daily Mail 7/2/18 - Look inside the abandoned homes on Hull's ghost estate

Development in this area began in the 1920s, and by the mid-1940s the area was full of housing. The current regeneration scheme began in 2014 and consists of 540 demolitions, 300 refurbishments, with 1,000 new houses being built. The demolitions and refurbishments are moving at a faster pace than the new builds, due to demand for housing in the area. The result is that the area looks somewhat abandoned, yet despite this there are no new plans for environmental improvements or the creation of additional community infrastructure.

In Sunderland, one of the post-war housing estates, Pennywell, built between 1949 and 1953 as part of plans to regenerate the area, saw 583 dwellings demolished, with 283 of them in one location (Cocurate, 2012). Many of these had been empty for

more than a year before they were demolished in July 2002, and many had been subject to arson and other forms of vandalism, rendering the area a less than desirable place to live. The site has stood empty since the demolitions, with a number of paths being placed across it to encourage use. However, this has not transpired, with only a few driving schools using it to teach learner drivers away from the road, and is often used for fly-tipping, including dumping fridges and bags of rubbish, and consequently several fires have been set across this area (Author interview: Local Authority HAZ Coordinator - SP2, February 2018).

Figure 6-20 Site of former Pennywell Estate, Sunderland



Source: Evening Chronicle 11/2/19 - as Plans for 118 homes on former Pennywell estate set for approval

The Pennywell Estate site has been granted planning permission for 118 dwellings, and a local housing developer will be leading this project in a joint venture with the City Council. The City Council will provide the enabling infrastructure, including a new road network, facilitating access from the A183, which currently has no access. The housing developer often builds social housing,

but this site will be exclusively housing for private sale, with the aim of changing the current social mix of the area. For this, they have developed a new house style, which will be located on the front of the site facing the A183 – Chester Road, with houses of a smaller size towards the back of the site, which will vary in price to attract a range of residents. Because of the negative image associated with Pennywell, this site will be renamed Chester View (Author interview: Housing Developer Land Manager - SB2, January 2018).

The erosion of neighbourhoods can affect community cohesion and make it less attractive for people to move to the area, because the desire to live near similar people may be eradicated. This can lead to properties remaining empty for longer, making them vulnerable to vandalism. In this situation, the property owners may start letting their properties on a short-term basis, leading to transitory neighbourhoods, that can result in further fragmentation of the community (Author interviews: Housing Developer Land Manager - SB2, January 2018 and Area Community Development Coordinator - SC4, December 2017).

Both areas have resulted from redevelopment plans. However, the timescale for implementation, in both cases, have been excessively long. These areas have not been attractive to private housing developers due to the prices that the houses are likely to achieve in the current market conditions, illustrating once again the weak market conditions that operate in both cities. Additionally demonstrating, however, that there may be sites with higher intensity of weakness than the city as a whole.

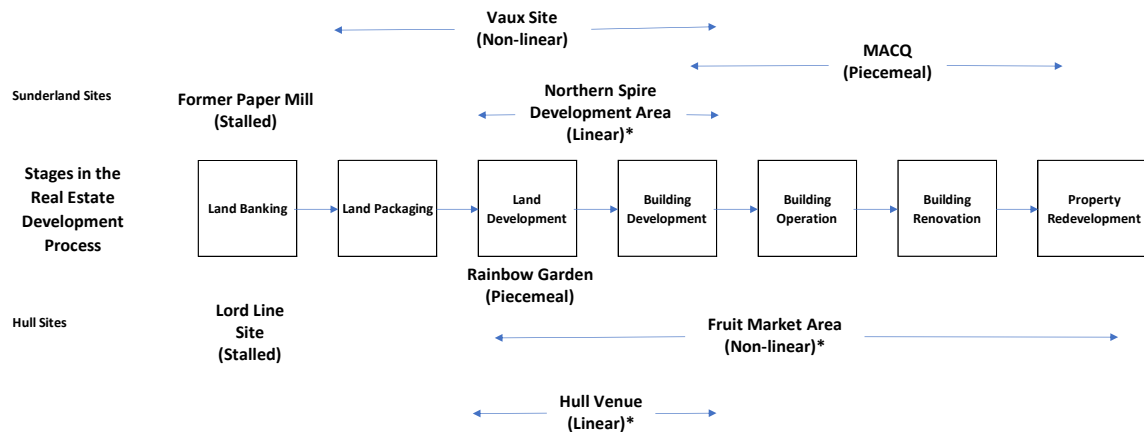
The weak market conditions that prevail in Hull and Sunderland have clearly constrained the development of these sites and limited investor interest, due to the perceived financial returns being considered unacceptable. Their long-term underutilisation has had negative impacts on the surrounding areas and attracted anti-social behaviour, which has further exacerbated negative social and environmental conditions in the neighbourhood.

There are simply too many sites here to examine in detail. Thus, the case study sites examined in Chapter 7 were selected through applying the Real Estate Development Matrix as a filter and looking for comparable sites in Hull and Sunderland – as is illustrated below:

Case study sites in relation to the Real Estate Development Process

Location of case study sites against the Real Estate Development Process

(adapted from Kohlhepp, 2012)



Source: Author's own

6.5 The development models used in Hull and Sunderland and their underpinning concept of value.

Both Hull and Sunderland are pursuing neoliberal pro-growth economic development models, and are seeking the means to attract investment to improve their prosperity by increasing employment. In Hull, the belief remains that if people have well paid jobs, then they will be able to afford houses and spend more on local goods and services (Author interview: Local Authority Planning Manager - HP2, June 2018). Indeed, this was the purpose of the Hull City Plan 2013, that set out the nodes where the Council and its partners would like to see development – which would generate employment opportunities – take place. Although improving employment is a clear priority for Sunderland City Council, the location for development is more broadly articulated through the Economic Master Plan 2010. Although these are supported through each city's Local Plan, they merely set out land use allocations, which essentially limits the value of sites to their use value in economic terms, i.e., for housing or employment.

Neither city has an investment prospectus for the sites within their cities, but Sunderland recognises the need to do this and to package together parcels of development land and property to make it worthwhile for investors, which will mean opportunities in excess of £100m (Author interview: Local Authority Executive Director for Economy and Place – SP4, October 2018). Although the

returns available are very important to potential investors, of equal importance is the long-term story, or vision for an area. This is because the investment time period (Author interview: Policy Director British Property Federation – N6, December 2018) will require a clear statement about what other developments are likely on adjacent sites, the time frame for these and a clear articulation about potential development for the investment in terms of population and business growth. These are the very factors that weak market cities lack.

Both Local Authorities are, or are becoming, city centric because they recognise that the previous focus on developments on the outskirts of their cities are not stimulating demand for sites in their city centres. Hull has had this focus for some time, with a major impetus being the Hull Citybuild (RTandP, 2003) plans in 2003. This was strengthened through winning City of Culture and the development of the Public Realm Strategy (HCC, 2014b), which facilitated improved access to a number of nodes and became the focus for regeneration (Author interview: Local Authority HAZ Project Manager - HP3, July 2018). Although the Sunderland Economic Master Plan (SCC, 2010) had two main investment corridors within it, they both essentially by-passed the city centre and the latest Local Plan (SCC, 2017) was considered to be somewhat silent on the development of the City Centre (Author interview: Local Authority Executive Director for Economy and Place – SP4, October 2018). However, this is being addressed by the development of a £100m City Centre investment plan.

A major feature of the approach in both cities has been to undertake public realm developments that have a minimal maintenance cost, due to constrained financial resources. Although Local Authorities can borrow on very good terms for capital investment, ongoing revenue funding is more difficult to access. This has meant that hard surfaces are being used, rather than taking the opportunity to enhance the green infrastructure and potentially improve the environmental conditions and promote a broader feeling of well-being amongst those who use these areas.

6.6 Market failure in the reuse of redundant spaces in Hull and Sunderland

Although there are alternative views about the value of redundant space, the market value return is a key factor in determining whether the reuse of these sites

is considered. This is due in part to the Public Sector Value for Money framework, meaning that the return on investment must benefit society as a whole (Lowe, 2008). An element of market failure in both Hull and Sunderland arises due to the location specificity of particular plots of land within the Local Plans, as well as their land use allocation. Areas that have remained unused for long periods of time or that have been subjected to vandalism, can act as a disincentive to the development of adjacent plots (Cheshire, 2009).

Although some of the redundant spaces in Hull and Sunderland are relatively large scale, others that are in multiple ownership may be too small for some private sector investors to consider, because of the increased complexity of negotiating with owners that require different returns on their land or property. In addition, the size of the investment opportunity can also be below the level of return desired by investors (Author interview: Local Authority Executive Director for Economy and Place – SP4, October 2018).

The designation of specific areas or property as conservation areas, Heritage Action Zones or Listed status could be seen as a constraint to market led developments, because of the limitations they impose. However, in weak market cities such as Hull and Sunderland, they enable access to a range of public sector funding and support to assist with physical regeneration in the area. Although this is an enabler, it also acts as a constraint to other developments – as illustrated by Sunderland Synagogue in Chapter 6, Section 3.

A characteristic of both Hull and Sunderland is the low value of much of the land in the city centres. These low land values often lead to private owners' land banking sites in the hope that they can secure a favourable designation within the Local Plan, enabling owners to realise a better price for their land. However, because of the weak market conditions prevalent in each city, it is often necessary to incentivise developers through enabling infrastructure or relaxed planning regulations (Author interviews: Local Authority Major Projects Manager - HP1, 2018; Local Authority Planning Manager - HP2, June 2018; Local Authority Planning and Regeneration Manager - SP1, February 2018 and Local Authority HAZ Coordinator -SP2, February 2018).

6.7 Approaches to market interventions in addressing redundant spaces in Hull and Sunderland

Local authorities in Hull and Sunderland recognise the difficulties in attracting private sector investment to their cities, and to particular areas that impact negatively on the image of the cities. However, the market-based approaches adopted by these two cities constrain the projects considered. In Hull, the main industrial areas along the A63 to the west of the city have been able to attract investment due to their accessibility and less of a need for enabling infrastructure; whereas areas within the city centre prove more problematic. In Sunderland, the arterial routes along the A19 and in Washington are more able to attract investment, again because they are very accessible but also offer a number of greenfield sites; whereas areas in and around the city centre prove more difficult. Factors contributing to this are the associated costs of undertaking development within the city centres due to access issues, the location of the available sites and the associated vitality of these areas, leading private sector investors to overlook the opportunities and thus market failure occurs. To alleviate these challenges, a number of approaches have been used to stimulate investment or enhance the quality of the developments that are periodically offered by the private sector, once a broader plan for the area has been set out.

The broad approaches that have been adopted in both Hull and Sunderland are joint ventures and partnerships enabling and facilitating developments to begin and progress, as well as the direct acquisition of land and property to remove ownership issues that may impede development. These are funded from a range of sources including Local Authority reserves obtained from the selling of assets, funds from European Union Programmes and UK Government funding initiatives, sometimes through non-departmental public bodies or agencies.

Joint ventures/partnerships – enabling development

Within each city centre, there is a flagship development. Within Hull this is the Fruit Market Area, which is the cultural and technology quarter, and in Sunderland the Vaux site. After the fruit traders moved out of the Fruit Market area and following failed attempts by Hull Forward to regenerate the area and its subsequent demise,

the City Council took over responsibility for redevelopment. To help take this forward, they appointed a development partnership, Wykeland/Beal, who are a regeneration company and a housing development company, respectively. The City Council retain ownership of the land and have been responsible for major infrastructure works in the area, particularly flood defence works to safeguard the physical development and the environment along the River Hull. Other physical developments to attract and locate employment through a combination of refurbishments and new build are being delivered by Wykeland, while housing in the area is being delivered by Beal Housing. This public-private partnership provides a 'sustainability fix' for this part of Hull, through the sympathetic redevelopment of the area by retaining some original buildings and public realm and building new infrastructure. The occupants of the area are intentionally limited to independent businesses and the housing, once complete, will offer a mix of types, including a proportion of affordable housing. This approach is intended to give the area a different feel and offer from the rest of the city centre. In addition, there are excellent transport links to the rest of the city, as it sits adjacent to the A63 but also has active transport infrastructure enabling walking and cycling, as well as being linked to public transport routes. Significant investment in the Public Realm, in advance of the 2017 City of Culture, enhanced the appearance of the area but it is predominantly hard landscaping, which while improving the attractiveness of the area is also easy to maintain. This has been an important consideration in this area and across the city, as green space can be costly to maintain.

An ongoing issue for the Fruit Market area is the fact that the A63 severs it from the rest of the Old Town. Although various plans have been proposed for footbridges and underpasses to alleviate the issue and to enhance integration, none have been pursued because of the economic imperative to improve access to the Ferry Terminal, through the redevelopment of the A63 as the priority. However, this is a Highways England scheme and thus Hull City Council are in ongoing negotiations to get things moving. This may pose problems for other developments in adjacent areas particularly around Myton Street. Despite this, having congestion addressed on this stretch of the road should ultimately improve air quality in the area, which would benefit the Fruit Market Area and the wider city centre.

The Vaux site has had several proposals for its development following the closure of the Brewery, and is being operated by a development partnership, Siglion – which includes Sunderland City Council and a private sector partner. Originally this was Carillion, but they went into receivership and have been replaced by Tolent. The site is proving difficult to deliver with virtually no interest from private sector developers. To make the offer clear, a master plan has been produced for the site by Siglion, setting out the opportunities and proposed development. Siglion recognise the need to ‘make the market’ for high specification offices in the city (Author interview: Chief Executive of SPV Development Organisation - SB5, July 2017). Thus, the Sunderland City Council have funded the construction of the first building on the site known as ‘The Beam’, which is due to be completed by Spring 2019, having been stalled by the collapse of Carillion. Although initially there were enquiries about the building from potential private sector tenants, Siglion are now offering incentives for tenants, which may indicate there is still relatively low demand for space on this site. The second planned phase of the development is a public sector hub, with DWP committed to locating there. However, there is concern from some stakeholders in the city that this will cause displacement from elsewhere in the city (Author interviews: Business Group Board Member - SB1, February 2018 and BID Operations Manager -SB6, September 2018). Recently, it has been reported that the City Council will be relocating to this site (Source: Sunderland Echo 17/10/18), as the current Civic Centre is too costly to repair and this will create a city centre housing site, which if developed will again add human activity to the City Centre, enhancing footfall and increasing demand for city centre services.

The master plan for the Vaux site covers a 20-year period and as well as commercial space there is provision for housing – which is likely to be increased from the initially planned numbers (Author interview: Local Authority Executive Director for Economy and Place – SP4, October 2018) – and a link to Riverside Park, which is below the Vaux site. The overall aim is to increase human activity and to improve footfall into the city centre. This could be viewed as Sunderland’s ‘sustainability fix’, which will be assisted by some of the ‘meanwhile’ uses that have been granted planning permission on the site to bring people onto it, including community gardens for growing vegetables. (Author interview: Director of Community Engagement Organisation – SC1, January 2018).

Both of these developments are very important for enhancing the vitality of their respective city centres and require significant resources to progress. The Hull Fruit Market Area is progressing well and has tapped into the growing interest in culture led regeneration and technology. By focusing on smaller independent businesses, it is providing something different from the 'corporate' offer from national operators elsewhere in the city. It has attracted the 'East Riding Pound' to Hull and will eventually provide a different living experience from other parts of the city. The Sunderland Vaux site still seems to be struggling with its 1980s Property-led Regeneration approach. Although attempts are being made to relate the site to the cities shipbuilding history by the Keel Line, that names all of the ships launched from Sunderland, continuing from Keel Square on the other side of the dual carriage way through the site to a structure which is intended to be on the edge of the site called 'The Launch'. This sculpture symbolises the launching mechanism used in the shipyards and will provide a means to access Riverside Park below. Because the site was cleared of all vestiges of the Brewery there is nothing to build upon, and the proposals for the site appear very corporate. If successful, they will address the perceived office market deficit in the city and potentially provide a higher earning footfall for the city centre.

Although the approach in both cities was aimed at enabling development, the outcomes have been very different. In Hull, there was a clear focus on the end users of the site and the nature of the sectoral focus being targeted. It builds on the history of the area and aims to create a desirable area to live, work and play in. The various partners that are engaged in the development of this site have created an offer not available elsewhere in the city. In Sunderland, the ambition for the site was to provide a higher quality office space not available anywhere else in the city centre, and because the site has been cleared and enabling infrastructure put in place, the expectation was that the private sector would rush to develop on the site. Despite the City Council funding, the construction of the initial building has failed to attract any investor interest. This suggests that a market-based approach for this site was inappropriate, and it is unclear what on-site relationships are possible. The location of these two flagship sites could also be a factor in the pace of development as the Fruit Market is just off a major road, whilst the Vaux site is in the city centre surrounded by a convoluted road network. Clearly, this approach

can have variable results and requires significant financial investment by the Local Authority. However, the more organic approach in Hull is proving more successful than the top down fully planned approach in Sunderland.

Joint ventures/partnership – facilitating implementation

One of the reasons behind the long-term existence of redundant spaces in the two cities, is the relatively low land values and the perception from developers that they may not achieve the financial return on their investment if they were to build. From the standpoint of both Councils, if developments were to take place, then they would not be of the quality that they want for the city as a whole, and for the individual site specifically (Author interview: Local Authority Planning Manager – HP2, June 2018).

The area around the Music, Arts and Culture Quarter (MACQ) in Sunderland provides a useful illustration of this particular approach. As detailed earlier, the properties in this area are in multiple ownership, some public and some private, and the area is intended to bring a stronger cultural offer to the city centre. One of the buildings in this area is the former Gill Bridge Police Station, a brutalist 1970s architecture building. In 2016, the Sunderland City Council purchased this building with the view to demolish it to provide development land for sale. However, because of its close proximity and integration with the Magistrates Court, this proved to be unfeasible as any structure that was put in place of the former Police Station would need to be the same height and footprint of the existing building and so the Council decided to sell the building (Author interview: Local Authority Planning and Regeneration Manager – SP1, February 2018). An entrepreneur has an option on the building, but in order to make it a viable development opportunity the council-funded access road that is being constructed to improve access to the MACQ and will necessitate the relocation of a substation that currently serves the former Police Station, needs to be completed.

As part of the development of this area, Keel Square was created from residual space left by the construction of St Mary's Boulevard. This square was funded by the City Council as it was felt that Sunderland lacked an identifiable centre, therefore making this the aspirational town centre (Author interviews: MAC Trust

Board Member - SB4, June 2017 and Local Authority HAZ Coordinator - SP2, February 2018) with the MACQ, Bridges Shopping Centre, Vaux site and High Street nearby. As part of this broader development, it was believed that attracting a hotel to the area would again bring people in and offer a service to those visiting for leisure or business reasons. A developer has come forward to build a hotel and having considered the land values and the costs associated with getting to the construction phase, the nature of the proposed structure was considered of insufficient quality by the City Council (Author interview: Local Authority Planning and Regeneration Manager – SP1, February 2018). However, they did not have any other developers proposing alternatives. Recent hotel developments in the city have included a Travel Lodge and Premier Inn, but these were considered by the City Council to not to be the quality of development that they wanted for this particular location. In addition, the Holiday Inn developer, who have just opened a new hotel across the river at the Stadium Village, showed no interest in investing in this area. Therefore, the City Council have agreed with the original developer to take a head lease on the ground floor, giving them a guaranteed income stream and enabling a higher quality of design for the building to be constructed and contributing to a more sustainable development of the area. As of yet (March 2019), there is no sign of the development beginning to take shape – although new designs have been agreed with the City Council. Elsewhere in the city, particularly on the coast as part of the Seaburn Masterplan, the Council have gifted land to developers in order to enable a better quality, in terms of size, building material and aesthetics, project to be delivered. These are important considerations for the longer term, as how a building looks and performs after a number of years can impact either positively or negatively on the surrounding area.

Queen Victoria Square, which is Hull's central point between the Old Town and the Hull Minster (previously Holy Trinity Church), and the Guildhall is Whitefriargate was the main shopping street in the city centre until the late 1980s, However, with the development of Princes Quay Shopping Centre in 1990, demand in this area began to decline and with the opening of St Stephen's Shopping Centre in 2007 it was decimated (Author interview: Local Authority HAZ Project Manager - HP3, July 2018). There are a significant number of vacant units along the street, including a number of large stores vacated following the

closure of major high street names. The street is part of Hull's Heritage Action Zone and contains 30 listed buildings, with the entirety of the south side being listed and all in the ownership of the Hull Trinity Brethren. These were the Hull version of the Trinity House Trust and were very influential, having established themselves on the back of the wool trade and were significantly more powerful than the Hull Corporation. However, as things have changed over the years and while their status has diminished, they still maintain a maritime focus and do a lot of work around families of people who work in the maritime industries. They also continue to manage an incredibly rich historic estate, although their ideas about how to manage this are out of alignment with the Council's plans for the area. Because Hull Trinity Trust is a charity, they get rate relief and so can have a tenant, but they are not overly selective about who they get in. Thus, in the past they have had a number of charity shops, Heron Frozen Foods opened up opposite M&S, which while it is good to have an occupant who keeps it in use, is not the sort of location that higher end users are looking for.

Ultimately, the sustainability of the street as a whole is under question, with the quality and number of retailers taking a nosedive and a lot of vacant shops. By contrast, there has been a lot of investment on either side of Whitefriargate as part of the Public Realm programme. While the streetscape is all new and there is improved lighting, many assert that something still needs to be done with the buildings (Author interview: Local Authority HAZ Project Manager - HP3, July 2018). It is still identified as a primary retail area in the revised Local Plan, but the type, size and unique nature of some of the units mean it is unlikely that major retailers will move in. Thus, the HAZ will draw up a strategy and apply for additional funding through the Coastal Communities and Cultural Development Fund, to try to provide some sort of food and beverage services in this area, along with cultural attractions and niche retail. It has been recognised, however of the need to tread carefully given that the Fruit Market has established itself as an area for independents within the city, while simultaneously addressing a gap in family dining provision (Author interview: Local Authority HAZ Project Manager - HP3, July 2018). Therefore, the aim is to foster Whitefriargate as an area offering something between the big corporates located across the city, particularly around St Stephen's, and the independents in the Fruit Market. This

will mean attracting businesses that operate in other cities of a similar socio-economic condition to Hull and should enable improved usage of the units down the street. While the area has a very high footfall, the dwell time is low, as people tend to use it as a conduit between the Old Town and the New Town.

Both Hull and Sunderland have been developing Local Authority strategies and plans for a number of years but lacked resources to get them moving. Funding available via Historic England and National Lottery Heritage Funding has helped to catalyse action and lever in other funding. Although the aim was to bring economic benefit to the areas, the approach taken was to build on heritage assets rather than focus fully on new developments. This piecemeal approach to implementation means that it can be a long process but will contribute to sustainable development through the repurposing of existing buildings.

Land and property acquisition

Sometimes the only way for Local Authorities to ensure a development takes place, is to directly purchase land or buildings, either through Compulsory Purchase arrangements or direct agreement with the owners. For larger scale developments, this can be a combination of the two, and there are examples of these approaches in Hull and Sunderland.

In order to enable the Hull Bonus Arena, which is one of the City Council's flagship, post-City of Culture projects to be built, the site needed to be assembled. The land and buildings in the area were held by multiple private owners, including the owners of Princes Quay Shopping Centre. Through negotiation and land swaps, the City Council was able to assemble the necessary land for the site (Author interview: Local Authority Major Projects Manager – HP1, May 2018). They then were able to put in the necessary infrastructure and contract for the construction of the building. It is unlikely that this Arena would have been constructed in this location without Local Authority intervention, because the complexity of the site and access issues would have rendered it unviable from a commercial perspective. However, with development it will generate footfall within the City Centre and be critical to helping to improve the evening economy in the Old Town.

Hull City Council own a number of housing sites across the city, which they have purchased to ensure that homes are built in the places where they are needed (Author interview: Local Authority Planning Manager – HP2, June 2018). Some of these sites are more desirable than others because they have the necessary infrastructure, contain few abnormalities, or are of an appropriate size and shape and straight forward to access. Others are less easy to access and or to develop on. Obviously, developers prefer the easier sites as this will be delivered at a lower cost to them. However, the City Council work with house builders so that if they wish to build on one of the easier sites, they also have to take on and commit to build on a more difficult site (Author interview: Local Authority Planning Manager – HP2, June 2018 and Land Manager, City Council Development Partner – HB5, June 2018). This obviously increases the housing supply but also facilitates the use of more difficult to develop and presumably less profitable sites.

The Sunderland Heritage Action Zone includes the High Street. Sunderland developed from the eastern part of this area, and so is of significant historical value and both High Street East and West have a number of buildings of high heritage value. These include 170-175 High Street West, which is where the Binns department store was founded and operated for forty years before its relocation to Fawcett Street. The buildings were bought, and the owner had intended to redevelop them into apartments, but this did not happen. Instead, they have stood derelict for many years, with deteriorating structure and plants growing out of the roof and from the guttering. Because of their poor physical condition, commercial development was unlikely unless it was possible to demolish and then rebuild them – but because of its local historical significance this was considered undesirable (Author interview: Local Authority HAZ Coordinator – SP2, February 2018). The owners were unable to develop the buildings and so they sold them to the City Council, who in turn gifted them to Tyne and Wear Buildings Trust to restore them. They are in the process of reconstructing the buildings and in one of the more habitable parts a local business has moved in and are offering a range of events and facilities for the local community. This is not only bringing new uses to a derelict building; it is providing a community facility and business opportunity as part of the cultural offer of the city.

The Northern Spire road bridge was constructed as part of the Sunderland Strategic Transport Corridor linking the Port to the Advanced Manufacturing Park. This required a number of Compulsory Purchase Orders to enable this on-going major infrastructure project to take place. On the south side of the Northern Spire, the former Groves site was made far more accessible, enabling a new settlement consisting of houses, a school and some commercial premises to be proposed for the site. The Strategic Transport Corridor has been funded via the City Council in order to provide the enabling infrastructure, but investments within the surrounding areas will need to be brought online by the private sector (Author interview: Local Authority Executive Director for Economy and Place – SP4, October 2018).

It is clear that without significant Local Authority intervention, these projects in Hull and Sunderland would not have happened. The Local Authority contribution is currently filling a gap that private investors and developers are not willing to fill, and so are attempting to address a market failure, rather than ‘crowding out’ private sector investment. The role that the Local Authorities play is to facilitate private sector profits by providing enabling infrastructure, de-risking sites and underwriting developments through various means. Although these are just two case study cities, these trends are likely to be replicated in other weak market cities.

6.8 Conclusion

Although there is evidence to suggest that brownfield sites are often located in city centres, this does not appear to be the case for redundant sites in Hull and Sunderland. Redundant employment land tends to be located close to the river or the coast in both cities, while redundant housing sites, particularly in Sunderland, are more widely dispersed across the city. Multiple sites tend to be in more deprived neighbourhoods, but the characteristics differ between Hull and Sunderland. In Hull, the more deprived areas with multiple redundant spaces tend to have relatively poorer environmental and social conditions, whilst in Sunderland it’s the weak economic conditions that characterize these areas.

The structural and social changes impacting on each city over time, have created a wide variety of redundant spaces. Although processes of deindustrialisation have played a major role in their creation, constraints on public finances have also had a

major impact on institutional spaces. However, changes in demographic and technology requirements also influence their creation. Spaces that are designated for recreational activities are often created from changing customer preferences, whether that be due to the scale of the land that they are responsible for or functional relocations making an area less attractive. Large scale developments may not always utilise all the land available, and so leave remnants that are difficult to develop because of the social, environmental or landscape characteristics of these spaces. Land designations can constrain the use of some spaces, especially when they are designated for housing. In part, this is influenced by the characteristics of the area and the market demand for properties in that locality.

Neoliberal pro-growth strategies for development can constrain the reuse options considered for these spaces, due to seeking market-based solutions to their redundancy. This is influenced by perceptions of inadequate return on investment and the existence of a clear statement about the development potential of individual sites and those on adjacent land, as well as the likelihood that they will support the growth of businesses and populations in the area. However, in weak market cities, Local Authorities often need to intervene to facilitate private sector investment in redundant spaces.

Chapter 7. The drivers and constraints on the reuse of redundant spaces in Hull and Sunderland

7.1 Introduction

The purpose of this chapter is to consider what the drivers and constraints on the reuse of redundant spaces are within Hull and Sunderland. It examines the national policy perspective on redundant spaces and how they have influenced local plans. In order to illuminate the issues that arise in relation to these spaces, I draw on examples from Hull and Sunderland in terms of the broad spatial distribution of these sites. In addition, four specific locations in each city at different stages within the Real Estate Development Process (Figure 3.1, Chapter 3) are analysed, in terms of their causes and consequences in relation to spatial equity.

7.2 The response of local planning policies to the national policy framework in Hull and Sunderland

The National Planning Policy Framework (DCLG, 2012) provides the context and priorities that Local Plans must address within their area. Therefore, the emphasis given to previously developed land in national policy, will have a bearing on the priority given to such spaces locally. However, the only mention of redundant space is regarding rural housing (p14) and protecting green belt land (p19). No mention is given to the reuse of redundant space in an urban context.

There is a delay between the introduction of national policy publications and their integration into local planning policy documents; although it must be used as a material consideration in deciding on planning applications once it is implemented nationally.

The National Planning Policy Framework (NPPF) was published in 2012 (DCLG, 2012) and both Hull and Sunderland published new Local Plans in 2017. These Local Plans should reflect the use of previously developed, or brownfield land as set out in the NPPF. The Planning Advisory Service produced a 'Soundness Self-Assessment' Tool (PAS, 2014) to enable Local Planning Authorities to ensure that

their Local Plans aligned with national planning policy. Some Local Authorities have published their self-assessments, but unfortunately neither Hull nor Sunderland have done so. However, the assessment tool provides a useful heuristic through which to consider Hull and Sunderland's Local Plan with respect to sustainable development. This sits within a context in which the TCPA (2016) claim that the 'planning system is failing to deliver to its potential and has in fact abandoned many vital sustainable development outcomes and the wider endeavour of place-making in favour of an overwhelming focus on the allocation of housing units'. The presumption in favour of sustainable development in the NPPF, which had been previously removed from planning policy in 1990, places greater power in the hands of developers subject to certain constraints to ensure that sustainable development is pursued positively. Although the Local Plans for Hull and Sunderland have various references to sustainable development peppered throughout the documents, the focus is very much on economic aspects and reflect the pro-development approach of national policy, indicating that previously developed land is preferred for this. The Hull Local Plan contains policy statements relating to issues of accessible housing and the need to conform with the Building for Life standard and sustainable transport.

Within both plans there is strong emphasis placed on good design and the contribution that this can make to social, economic and environmental outcomes within the city. As the TCPA (2016) have articulated, planning is both a political and technical process, and a key political driver in both cities is the growth and development of the areas - which is reflected in the respective local plans as the key framing strategies are the Hull City Plan (HCC, 2013) and the Sunderland Economic Master Plan (SCC, 2010). These set out the location of planned developments: in Hull's case these are specific sites, but for Sunderland they are more broadly articulated in terms of strategic investment corridors. However, neither of these framing strategies specifically consider redundant spaces, rather they are concerned with improving the general economic options available within each city.

7.3 Causes and consequences of redundant spaces in Hull and Sunderland

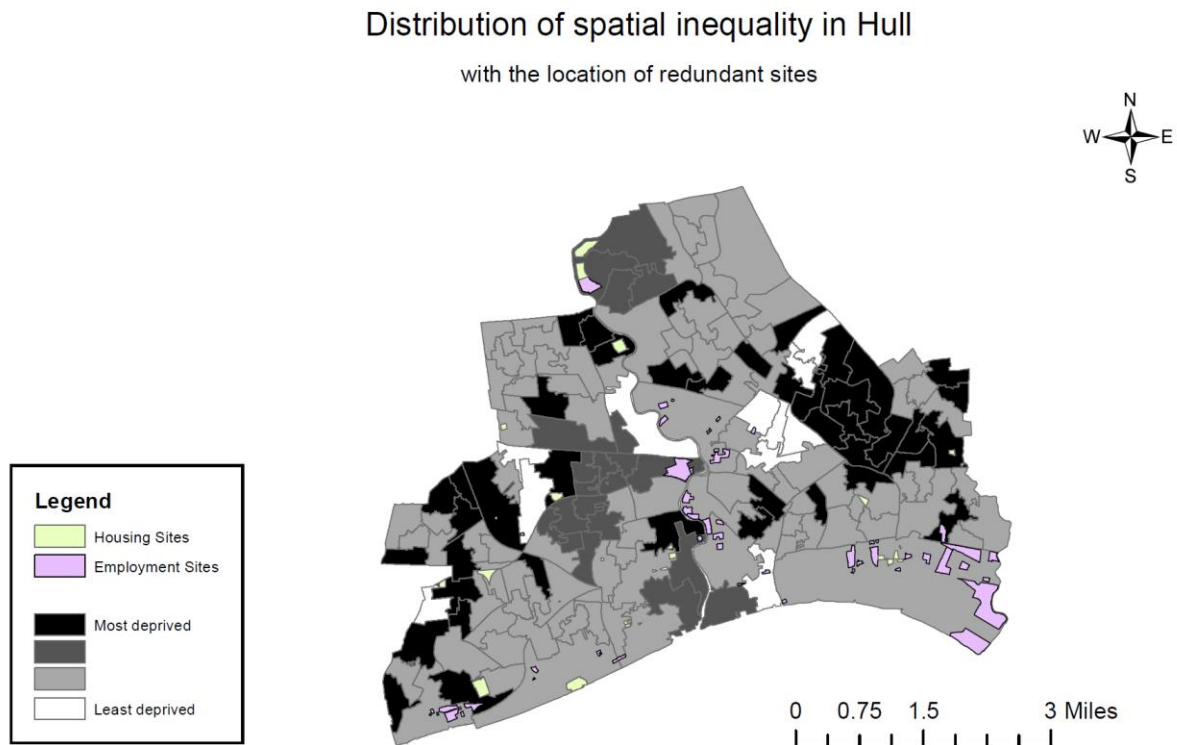
As outlined in Table 2.1, the location of redundant spaces can have a negative impact on the surrounding areas. This section considers the distribution of existing

redundant spaces in Hull and Sunderland and examines their causes and consequences.

Although redundant spaces appear to exist across the two cities irrespective of the level of deprivation in the area, the neighbourhoods with the greatest number of sites are in relatively more deprived areas in both cities. In Hull, most redundant sites are in areas of relatively higher deprivation, while there is no similar pattern to the distribution of redundant sites in Sunderland. Where unused or underused spaces exist in more deprived areas, they are more likely to become redundant due to limited interest from private developers as a result of perceptions of lower financial returns on investments. These spaces are unlikely to be a priority for Local Authority intervention unless they are within a strategic investment area. Local Authorities in Hull and Sunderland tend to seek to support economic growth by leveraging private sector investment, and more deprived areas do not offer opportunities for this.

The maps below show the spatial distribution of redundant spaces across Hull and Sunderland. In Hull, redundant spaces are concentrated to the west of the River Hull, reflecting the areas hardest hit by the decline in the fishing industry and deindustrialisation; and in the very north of the city which appear to be more prosperous. The areas to the west of the River Hull reflect the changes to industry, but also changes in residential patterns resulting in large areas of housing land being cleared, due to the decampment of communities by the City Council to other parts of the city.

Figure 7-1 Location of redundant spaces in Hull in relation to deprivation

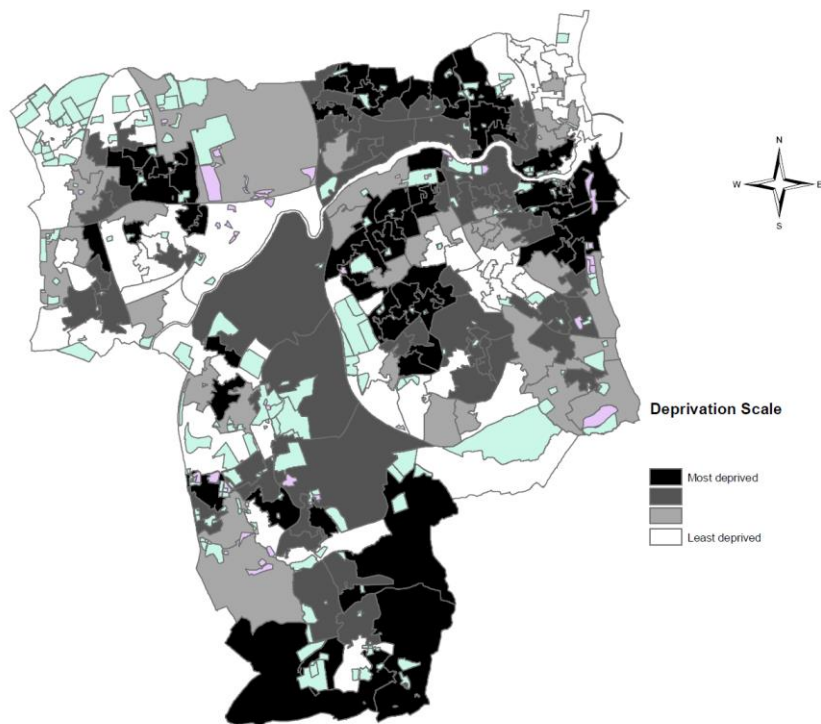


In Sunderland, the main concentrations of redundant spaces are in Sunderland South near the river. This is the area where one of the main industries associated with the city – shipbuilding and repair – developed, and although much of the north bank of the river has been regenerated the same is not true for the south bank. This may be due in part to the relative inaccessibility of the area in comparison with the north side, which has a direct link to the A19. Another area with relatively high concentrations of redundant space is the former coalfields, which are therefore associated with former industrial rather than residential or commercial areas of the city.

Figure 7-2 Location of redundant spaces in Sunderland in relation to deprivation

Distribution of spatial inequality in Sunderland

with the location of redundant sites



The distribution of high levels of deprivation is an indicator of spatial equity deficits, as these areas suffer from higher levels of economic, social and environmental distress and offer less opportunities to those who live or work there.

7.4 Location of case study sites and their relationship with the wider distribution of redundant spaces

This section identifies the case study sites and provides an explanation for the reasons behind their existence and duration of redundancy. Within Hull, the four case study sites selected are the Fruit Market area and the area around the Bonus Arena in the city centre; the Lord Line site at St Andrew's Dock; and the Rainbow Community Garden in North Hull Estate. Three of these sites are close to the River Humber and were reliant on it for their original existence; the fourth is in one of the housing estates where residents were decanted to during the post-war period. Because of the distance between the sites close to the River and the one in North

Hull Estate on the northern outskirts of the city, it is not possible to display them on the same map.

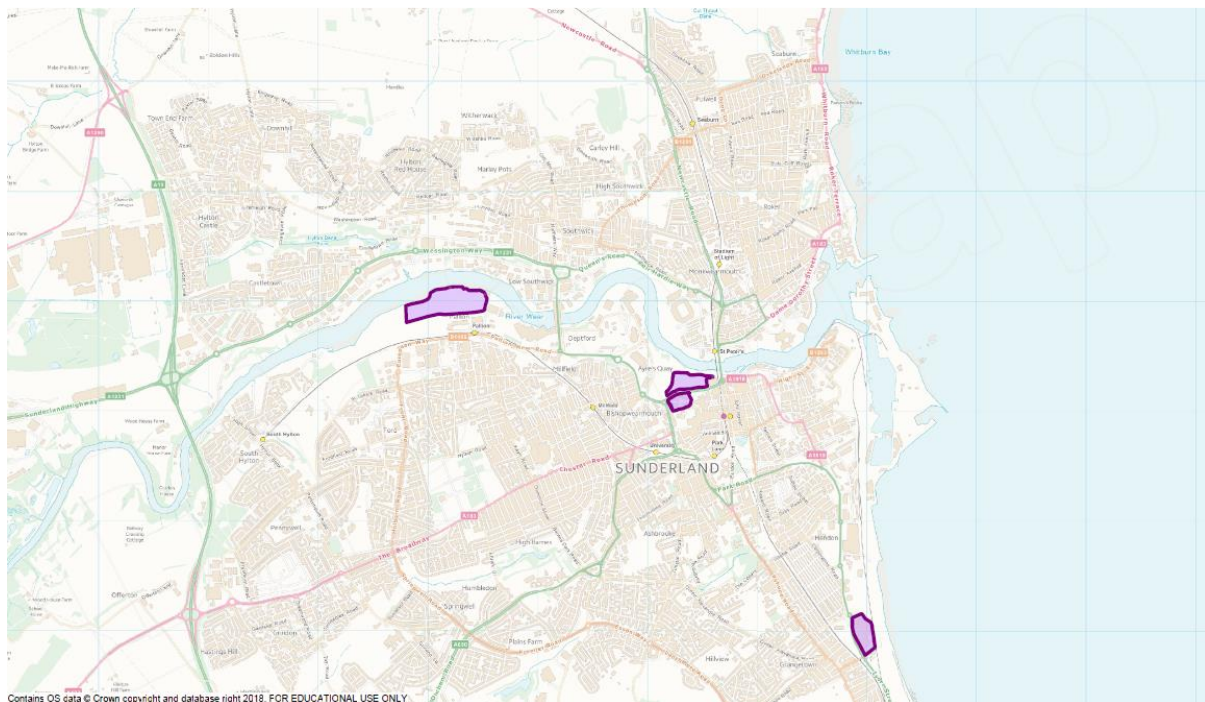
Figure 7-3 Location of case study sites in Hull



Source: Digimap generated 26/8/18

The case study sites in Sunderland are less concentrated around the river, but two of them - the Vaux Site and the former Groves site – are located close to it. The MAC Quarter site is adjacent to the Vaux site, while the former Paper Mill site is located along the coast, close to the sea in Hendon. These sites were far less reliant on the river for their existence than their counterparts in Hull.

Figure 7-4 Location of case study sites in Sunderland

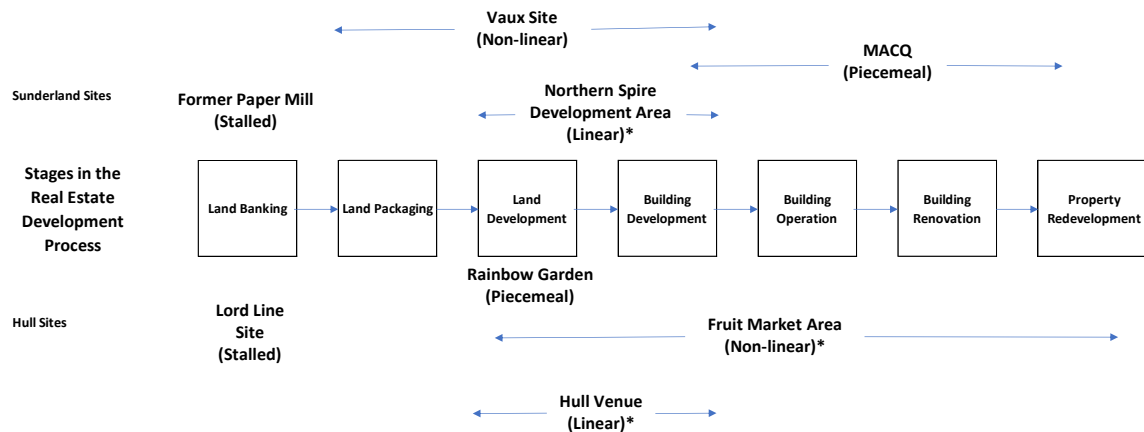


Source: Digimap generated 26/6/18

Using the Real Estate Development Process outlined in Section 3.3.3 (Chapter 3), pairs of sites will be analysed according to the phase and type of development they were experiencing at the beginning of this research. The sites are illustrated below in relation to this process. The phases and types of development used are stalled, non-linear development, linear, and piecemeal sites. Stalled sites are those that have experience little or no activity for a number of years; non-linear are those where development has not necessarily been sequential, whereas the linear ones have experienced sequential development. Piecemeal sites are those that have been developed through unsystematic partial measures over a long period of time. Just as the pathway to redundancy has various phases, so does their pathway to reuse, and the speed of the transition depends on multiple factors including ownership, accessibility, investment potential and prevailing market conditions. The case study sites illustrate some of the consequences of the different levels of investment potential that exist.

Figure 7-5 Case study sites in relation to the Real Estate Development Process

Location of case study sites against the Real Estate Development Process
 (adapted from Kohlhepp, 2012)



Source: Author's own

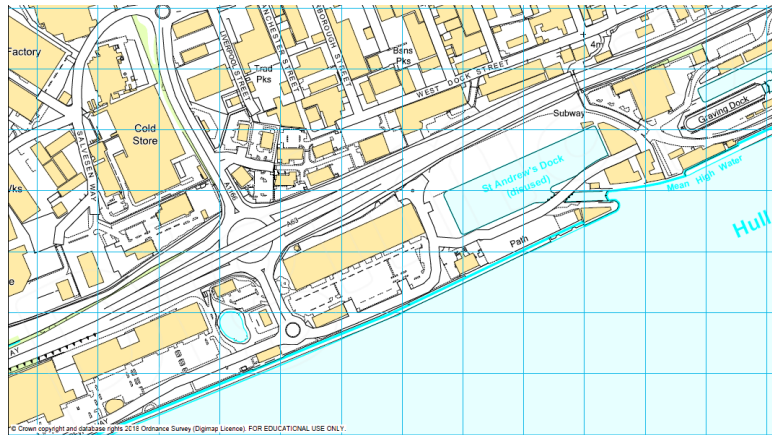
The two stalled sites, the Lord Line site on St Andrew's Dock in Hull and the Former Paper Mill in Sunderland are currently in a similar condition, in that they contain derelict buildings, are slightly disconnected from the surrounding area and cut off from their local residential community by the road network – however, their original purpose and evolution have been different.

Lord Line Site¹, Hull

This site is located west of the city centre in the former St Andrew's Dock area, with the A63 to the north and the River Humber to the south. To the west is St Andrew's Quay retail park and east a fully operational port (Alexandra Port).

¹ Information drawn from Lord Line Site Review

Figure 7-6 Location of Lord Line site, Hull



Source: Digimap accessed 9/6/18

St Andrew's Dock, on which the Lord Line site is located, was originally designed for the coal trade but was earmarked solely for the fishing industry by the time it opened in 1883 (HCC, 1996). The dock was unique in that all of Hull's fishing industry and its activities took place on the dock estate. It was a self-contained independent community with fish quays, railway sidings, ship repair, various factories and offices related to the industry, as well as community facilities such as a police station, post office, trawlerman's outfitters and coffee shops (InterTech, N/K).

Although the last boom period for the fishing industry was in the early 1970s, the lack of maintenance of the buildings on the fish dock meant that the cost of repair needed led to a decision in 1972 to move the fishing industry to Albert Dock, and in 1975 St Andrew's Dock was closed to shipping (Thompson, 1989). These changes coincided with the outbreak of the last Cod-War with Iceland, which led to a decline in the fishing industry from which it never recovered. This not only had an impact on the docks themselves, but the surrounding neighbourhoods that housed the fisherman and their families. The decline of the housing conditions in these areas led to the decampment of people from these neighbourhoods to new communities on the outskirts of the city (Thompson, 1989) .

In the 1980s, Clive Sullivan Way was constructed to improve links between the city centre and the Western Dock area, but this essentially severed the link to the former fishing community areas, as the new road networks was intended for car use rather than pedestrians and crossing between the two remains a convoluted process.

Some activities associated with the ship repair work on the William Wright Dock remained until in 1985, when the majority of the site was filled in to create a leisure and industrial park called St Andrew's Quay (Gurnham, 2011). In 1990, the remainder of the site was designated a conservation area because of its association with the fishing industry and unique flora along the riverbank (HCC, 1996). The purpose of the designation was to retain and preserve the buildings and features that best represent the former dockside character and protect key environmental features. These include a Grade 2 listed hydraulic tower and pump house, which was built in 1870, and the locally listed former trawler owners building (the Lord Line) that was built in 1949. Part of the site, near the lock pit, provides a space for an annual service of remembrance for lost trawlermen, memorialised on a plaque on a stone plinth.

Despite the conservation area status, a number of applications for the demolition of buildings have been submitted and approved, including an application in 1999 to demolish the Lord Line building, which was not progressed. Some buildings have been demolished without planning permission, along with filling the lock gates with concrete (Authors interview: Community Activist - HC1, April 2018).

Although an application for the creation of a student village was approved for the site in 2016, this was not progressed due to local opposition and the complex ownership of the land and buildings on the site. Therefore, little has happened on the site since its designation as a conservation area in 1990. The photograph below shows the site at the beginning of this research. It clearly displays the remaining buildings but also that it is used as an area for fly tipping.

Figure 7-7 Lord Line site, Hull



Source: author's photo taken 26/7/17

The site is approximately 6ha and is contaminated from its previous uses, with some of the land having turned to bog and parts of the ground are unstable. It is estimated by the City Council that £10m+ of remediation work would be required before any development could take place on the site (Author interview: Local Authority Planning Manager - HP2, June 2018). Also, new road access would be needed in addition to the existing spur from the A63, which currently only serves the retail park.

The current situation is that an application has been submitted for the development of a Heritage Dock, which would retain the Lord Line Building, but there is also a competing option to try and locate a new cruise terminal here, which would be a more commercial development (Author interview: Environment Forum Coordinator – HP4, June 2018). Neither of these proposals are progressing as yet.

This site's original purpose as the heart of the fishing industry ceased to be viable from the 1970s onwards and although some of the dock area has been redeveloped, the Lord Line site has suffered a slow degradation into its current state. It is at

present designated within the Local Plan as employment land, and so has a relatively low land value.

The surrounding area suffers from significant economic and social deprivation, with high levels of unemployment, crime and poor health which translates to high morbidity rates. It was a housing renewal priority area and so the condition of the housing is relatively good, but there is a high level of fuel poverty reflecting the low incomes of local residents. Because of the location of the area on the A63, which is the main route into Hull and on to the Ferry Port, the area also suffers from poor air quality.

There are very mixed opinions about the site amongst stakeholders. Local residents, those involved or who had family members involved with the fishing industry, want to see the site developed in a way that is sympathetic to its history, whilst others see it as an eyesore that should be levelled (Author interviews: Community Activist - HC1, April 2018 and Environment Forum Coordinator – HP4, June 2018). Amongst the broader business community, it is not really of any significance (Author interviews: External Affairs Manager, Hull and Humber Chamber of Commerce - HB2, September 2018 and City Centre Manager, Hull BID - HB3, September 2018) and from the policy perspective it is seen as an excellent location with potential for development, but with some major constraints (Author interviews: Local Authority Planning Manager - HP2, June 2018; Local Authority HAZ Project Manager - HP3, July 2018 and Environment Forum Coordinator – HP4, June 2018).

Former Paper Mill Site², Sunderland

The Former Paper Mill Site is located to the north of Ocean Road, in a former industrial area of the City. The site is bounded by a railway line to the east, which leads from the Port down through Seaham and on to Teesside and Commercial Road to the west. To the south is a gas works, with gas towers that are locally listed for their heritage value.

² Information drawn from Former Papermill Site Review

Figure 7-8 Location of former paper mill, Sunderland



Source: Sunderland City Council – Strategic Land Review East, May 2016

The original use for the site in 1862 was as a petrol storage facility, with a paper mill being established there in 1872, becoming England's largest paper mill. However, the scale of this production led to significant environmental damage in the area. This led to a change to production methods and resulted in significant refurbishment to the site between 1923 and 1939. Since then, there have been numerous alterations to the type and configuration of buildings and land uses, in line with the needs of business operations. The site was acquired from its original owners in 1962 by a Canadian company and continued operating until 1980, when the plant closed. Following this, it was taken over in 1981 by a locally based company and reopened as a print works, which added to the contamination of the site, only to close again in 2006. From then, the site stood idle and was subject to episodic vandalism, including damage to the buildings which rendered them unsafe (Author interview: Area Community Development Coordinator – SC4, December 2017).

In 2010, a planning application was submitted and approved for a mixed-use development of 300 dwellings and 6000 sqm of commercial floorspace. Despite this, the planning application lapsed, and no development took place. There is a view that the site was not viable for development, due to its location, the infrastructure and access needed, as well as the amount of remediation required to remove contaminants from previous uses (Author interview: Housing Developer, Land Manager - SB2, January 2018).

The photograph below shows the site at the beginning of the research and displays a number of derelict buildings. However, at this point it had 24-hour security installed in an attempt to curb further vandalism.

Figure 7-9 Former paper mill, Sunderland



Source: Author's photograph – taken 12/1/2017

The site is approximately 10.3ha and close to a dual carriage way and the sea, thus it lies in close proximity to the coastal wildlife corridor and forms part of the strategic green infrastructure corridor. There is currently outline planning permission for 300 dwellings on the site, but the area along the coast from the Port to this site is considered to be one of the most important employment development areas in the city outside of the Vaux site (Author interview: Local Authority Executive Director for

Economy and Place - SP4, October 2018) – although the site is designated for housing within the Local Plan. The site has now been cleared but no building activity has taken place.

As technology has moved on, the original purpose for the site ceased to exist. Its location on the coast in an industrial area that has suffered from long term decline and adjacent to an extremely deprived part of the city, has meant that there has been little interest in developing the site since its closure.

The adjacent area has a significant proportion of transitory residents, living in either private rented accommodation or hostels. Until the Local Authority funding cuts in 2010, there was a selective licensing scheme which meant that tenants were vetted, and properties were kept in reasonable repair, but this is no longer in place. Many who live there face complex social issues, often living hour to hour, never mind day to day and pay very little attention to the site, as the access routes to their houses do not take them anywhere near it. However, amongst the older established residents, of which there are now very few, the development of the site would be welcomed, as they remember either working there themselves or having family members working there. Younger people view its dereliction as part of the landscape (Author interview: Area Community Development Coordinator – SC4, December 2017).

Although it has been included in the Local Plan, the site is considered to have multiple issues which will mean that it is unlikely to be developed for a very long time. It has been a problematic site, as the owner has refused to talk to the planning department and local residents and the nearby school have complained that children have entered the building and so there are concerns for their safety - and the buildings have been vandalised (Author interviews: Local Authority Planning and Regeneration Manager - SP1, February 2018 and Area Community Development Coordinator – SC4, December 2017). A number of enforcement notices have been served on the owners over the years, which led to them placing security on site and continuing to submit planning applications. However, that is probably more to do with their interest to improve the land value in order to sell the land, rather than the owner being serious about developing it (Author interview: Local Authority Planning and Regeneration Manager - SP1, February 2018).

Both of these sites are privately owned and there would appear to be conflict between the owners, the planning authority and the local community in terms of what should happen with the sites. Their dilapidated appearance of the sites and the safety concerns amongst the neighbouring communities, negatively impacts on the area. The general lack of interest from investors or other developers very much stems from land ownership issues and in the case of the Lord Line site, from the fragmented ownership of the land and property. However, the landowners have not been overly active in driving forward the developments, hence why they are categorised as stalled, preferring to landbank the sites until they can secure development that will bring in a higher land value and change their land use allocation within the Local Plan, from employment to residential land. This reflects the lack of demand for these sites from employers or housing developers. In addition, they are both outside of the priority development areas within these cities.

The two sites that can be categorised as non-linear developments are the Fruit Market in Hull and the Vaux site in Sunderland. Developments in this category tend to have a number of irregular phases of activity that progress at different rates. Both of these sites are extremely large scale for the cities they are located in and are aimed at changing the offer within their respective city centres. However, progress within the Fruit Market in Hull is significantly more advanced than the Vaux site in Sunderland.

Fruit Market³, Hull

The Fruit Market Area of Hull covers an area of approximately 8.9ha and is located south of the Old Town, with Castle Street (A63) to the North which severs this area from the Old Town. Humber Dock Street and the Marina are to the west, the River Hull to the east and Humber River to the south.

³ Information drawn from Fruit Market Site Review

Figure 7-10 Location of Fruit Market area, Hull



Source: <https://www.fruitmarkethull.co.uk/discover>

The Fruit Market area has always been integral to Hull's old town, and its urban form and character are a legacy of the many environmental, cultural and socio-economic influences upon the old town throughout its history – from the construction of the town walls in the 15th century to the creation of the ring of inner docks in the 18th and 19th – and their closure in the 20th. While successive waves of development, most particularly in the second half of the 20th century, have eroded this relationship, the influence remains.

The Fruit Market had operated here since around 1905, bringing together fruit traders from across the city. Although it was heavily bombed during the Second World War and subsequently rebuilt, it remained the centre of Hull's wholesale fruit and vegetable trade until 2009. In 2007, plans were commissioned by Hull Forward shortly after its establishment for the comprehensive redevelopment of the area, with building work due to start in 2008. However, this would have led to significant demolition in the area. Hull Forward were seeking enterprising businesses to take up the warehouses, after they relocated the fruit and vegetable traders to a purpose-built site on the outskirts of the City. But in 2009 the plans for the area were scrapped, as they could not be funded in a realistic timescale, and consultants were appointed to produce a 'Meanwhile Use Strategy' for the area, to accommodate the needs of the arts and cultural businesses operating there. However, with the demise

of Yorkshire Forward in 2010, under the coalition government, who funded Hull Forward, it was wound up and Hull City Council took over responsibility for the redevelopment of the area. A new set of plans were tendered for and produced by a consortium of consultants and led to Wykeland Beal being selected as the preferred development partners by Hull City Council. These new plans still allow for a comprehensive redevelopment of the area, but in a more incremental way as funding becomes available. The site is currently designated for mixed use development in the Local Plan.

The location of the site presents a number of environmental issues relating to flooding, but also air quality. The latter is due to its location along the A63, and the traffic hold ups that occur on that stretch of the road due to the road configuration around the city centre. The focus is on improving economic vitality and there are limited social issues being considered, with maybe the exception of housing affordability.

The area is seen as a fantastic opportunity to bring a different element into the city centre, with more independent businesses (Author interview: City Centre Manager, Hull BID - HB3, September 2018 and Land Manager, City Council Development Partner - HB5, June 2018), and also a different housing offer compared with the rest of the city centre (Author interviews: Local Authority Planning Manager - HP2, June 2018; Local Authority HAZ Project Manager - HP3, July 2018 and Development Manager, Housing Developer – HB6, June 2018). It is viewed as an area that can attract people from outside the city and so bring in additional money (Author interview: Local Authority Planning Manager - HP2, June 2018), partially because the nature of the new housing is seen as being too expensive for many in the city (Author interview: Community Activist - HC1, April 2018). Since it focuses on economic, social and environmental issues in the area, it could potentially offer a sustainability fix within the city (Author interview: University Academic - HC3, April 2018).

Vaux⁴, Sunderland

This site is approximately 5.86ha and sits around 100m above the river, located within the City Centre and at the top of the River Wear Gorge – with both areas regarded to be of higher landscape and historic value. Although originally on Gill Bridge Avenue, the development of Keel Square and the new road layout creating St Mary’s Boulevard, which some people see as separating it more than previously from the city centre, led to the re-designation of its location address. It lies in close proximity to the coastal wildlife corridor along the River Wear and is therefore subject to Habitat Regulations Assessment (HRA). In addition, the development may impact on Wearmouth Local Wildlife Site, and it lies on the edge of the River Wear strategic Green Infrastructure Corridor.

Figure 7-11 Location of former Vaux Brewery site, Sunderland



Source: SCC (2016)

The Vaux Brewery bought the land and located on the site in 1875 and operated there until it closed in 1999. Shortly after the closure, the Local Authority commissioned an aspirational master plan for the site, due to the significance of its

⁴ Information drawn from Vaux Site Review

location within the city centre, to illustrate how the site could integrate with the existing urban fabric. No developers showed any interest in contributing to this plan, possibly due to the general market conditions within the city at that time, as well as the proposed specification of the buildings leading to concerns about the potential return on investment (Author interview: MAC Trust Board Member – SB4, June 2017).

Nothing happened on the site until 2002, when it was bought by Tesco who submitted a planning application for a mixed-use development, including both commercial and residential uses. As part of the application, the building of a major supermarket was included, and the application was refused by the local authority because of concerns about the potential negative impact on the main shopping centre. This led to a stalemate position between the supermarket chain and the local authority, which led to the deterioration of the site. Public outcry and complaints from surrounding businesses led to the owners clearing away six-foot high weeds in 2009. In 2010, the site was bought by the Regional Development Agency, after long and protracted discussions with the supermarket chain and its closure ownership of the site was transferred to the Local Authority (Author interview: MAC Trust Board Member – SB4, June 2017). In 2011, some tidying and temporary greening of the site was undertaken, along with the installation of temporary car parking, then nothing happened on the site until 2014 when the Local Authority formed a joint venture with a regeneration company (Author interview: Local Authority Principal Landscape Architect – SP3, January 2018). A masterplan was created for the site and planning applications for incremental development were submitted, including a number of temporary uses (Chief Executive of SPV Development Organisation – SB5, December 2017). The photograph below shows the site at the beginning of this research.

Figure 7-12 Former Vaux Brewery site, Sunderland



Author's photo (11/2/17) initial site preparation

Progress was being made on the construction of the first building, when the preferred developer went into receivership in January 2018 and the site was locked down. The joint venture company appointed a new preferred developer and work began again in July 2018.

The current situation (January 2019) on the site is that work is continuing, with the first building and additional infrastructure being put in place to facilitate the relocation of the Civic Centre to this site, as part of a broader public sector hub.

This is the biggest and most controversial site in the city, partly because of its location, size and length of stagnation. Much of the controversy about the ownership of the site was dealt with 'in camera' due to the legal discussions taking place, which led many local residents and businesses to blame the Local Authority for inactivity, and it was seen as a waste of space and a blot on the landscape (Author interview: Area Community Development Coordinator – SC4, December 2017). Local people feel a sense of loss or even bereavement about this site, partly because of the loss of the brewery itself, but also the links and relationships the company had through its pubs and off-licences in many neighbourhoods across the city. The symbolism of

Dray Horses delivering beers to pubs across the region are still very fondly remembered for many older people (Author interview: Local Priest - SC2, March 2018). There are no residential areas close to the site, apart from student apartments along the road that do not have a direct line of sight to the area, as it is obscured by another building.

The site had contaminants from its previous uses, which have subsequently been dealt with. However, because of its location and the amount of traffic passing the area, there is a relatively high level of air pollution. Additionally, because of its city centre location, the level of crime in the area is quite high.

These two sites are under Local Authority ownership, with land being released as developments come forward. They are both strategically important within their respective cities, and it is recognised that they will take a long time to develop, with the Fruit Market having a 10-15-year timeline and the Vaux site having a 20-year development horizon.

The fortunes of the two sites could not have had more different trajectories. The Fruit Market has tapped into the opportunities offered by culture-led and technology related regeneration, providing a distinct and independent offer from the rest of Hull. The development has kept many of the original buildings, retaining some of its historic character, whilst construction of new buildings is aimed at accommodating technology related businesses. There is demand from a range of developers to refurbish or build, as well as independent businesses and residents are eager to locate there. This contrasts with the Vaux site in Sunderland, where interest from the private sector to develop offices or housing is very limited for the plots available within the Master Plan. That site has been cleared of any original buildings and so retains none of its historic character, and any links with the city's history is related to shipbuilding, which did not take place on this site. The aim of the commercial development is for high quality offices, but without a clear sectoral focus and despite the City Council recognising the site will have a long-term development trajectory and allowing for 'meanwhile' uses there is no demand for these either. It would certainly appear that Hull has tapped into developments that are attractive to private sector investors, where the proposition to the market on the Vaux site is having the

opposite effect. Yet despite this, Sunderland City Council are still aiming to 'make the market' for high quality offices on this site.

The location of these sites within their respective city centres should make them equally as desirable, but this is obviously not the case. A major factor could be the accessibility of the sites via the road system, with the Vaux site being less accessible. It could also be the case that the Master Plan for the Vaux site is too tightly defined, thus limiting the options available to developers or investors, given prevailing market conditions.

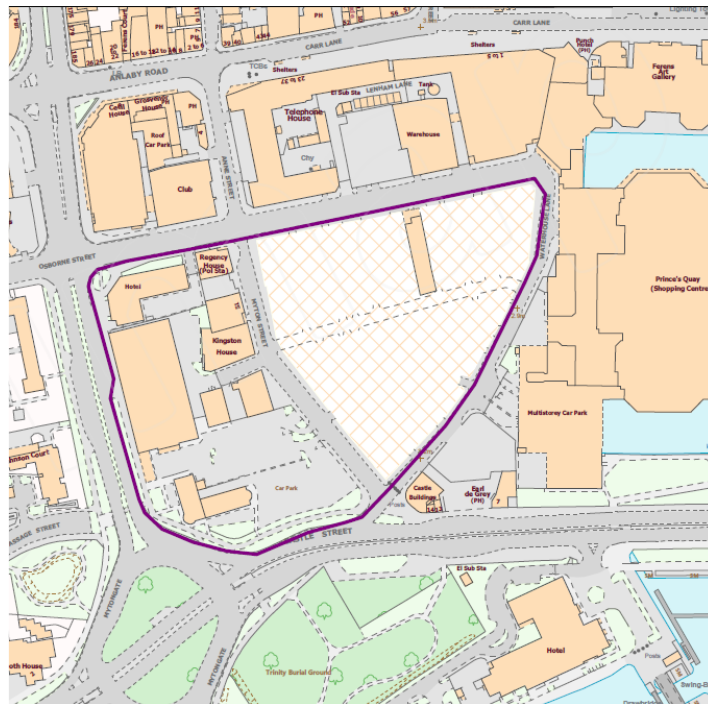
A linear development would be one that progresses seamlessly from beginning to end. The two sites that most closely represent this type of development are the Hull Bonus Arena area and the area around the Northern Spire river crossing in Sunderland. This may be an ideal type as few, if any, physical developments proceed without any obstacles or delays. However, within Hull and Sunderland there are elements of these particular developments that display these characteristics. In addition, these sites were chosen because of the fact they are linked with major infrastructure works to enable their effective delivery.

Hull Bonus Arena⁵

The site is located in the Myton Street area, between the city centre to the north, Princes Quay Shopping Centre directly to the east and the Marina to the south. The plot comprises multiple land uses: a multi-story car park, an ambulance station and disused commercial and warehouse buildings in the northern portion of the site. The eastern portion has residential properties, the Hull Boys Club and disused commercial and warehouse buildings. All structures in the southern and south-western portions of the site have been demolished.

Information drawn from Myton Street including the Hull Bonus Area Site Review⁵

Figure 7-13 Location of Bonus Arena, Hull



Source: Digimap accessed 17/7/18

The area was located outside the mediaeval town defences which were dismantled at the end of the 18th century, and the rapidly growing city expanded into the Closes to the west. The first phase of development in the area was dense housing and included a 'beast market'. Then, in 1829, Junction Dock (later re-named Princes Dock) was opened, which gradually changed the profile of the area from dense residential suburb to an industrial dock hinterland. In 1968, the dock closed to commercial shipping and stood redundant for over 20 years.

In 1991, Princes Quay shopping centre opened, having been built on stilts over the dock, as part of the redevelopment of the redundant Town Dock Estate following the opening of the A63 in 1981. The area behind the centre was used for a range of commercial and civic purposes. In 2007, outline planning permission was granted for a mixed-use development of the land behind Princes Quay shopping centre. This would have created a £300 million retail development and added 62,000 m² of shopping space, in 60 shops and two department stores. It was also planned to have featured cafés and restaurants and a leisure complex comprising a health and sports club, as well as a 175-bedroom hotel, and was earmarked to open in 2011. However,

the project was cancelled in October 2010 due to a change in ownership, the economic downturn and cuts to publicly funded regeneration projects.

In 2014, proposals were put forward by the owners of the Princes Quay shopping centre for the development of the areas behind the existing centre, which they named Quay West. This stressed the need for a comprehensive and co-ordinated approach to determining how the site should be brought forward, recognising the currently underused nature of the area with a poorly designed retail park, surface parking, redundant buildings, and a low-quality environment that had been created through a piecemeal approach.

There were some issues which may have acted as limiting factors to the development. Most notably the Vue Cinema and car park, which is at the rear of Princes Quay Shopping Centre, and along from this the service areas of the shopping centre.

Although significant progress on site preparation has been made since 2017 for the Hull Bonus Arena building, which has meant the demolition of a number of buildings including the former Ambulance Station and the construction of a car park and road access, apart from some public realm works very little else has happened in the area. Therefore, there are still a number of redundant buildings that have a range of owners but no clear plans for their utilisation. It has been claimed new opportunities may arise for these buildings once the Bonus Arena opens (Author interview: City Centre Manager, Hull BID – HB3, September 2018 and External Affairs Manager, Hull and Humber Chamber of Commerce – HB2, September 2018). However, applications to have the Hull Boy's Club building and some of the warehouses locally listed because of their heritage value have been refused, with the reason being that the area is intended for commercial development (Author interview: Environmental Forum Coordinator – HP4, June 2018).

There are very few people who live in the area, as it is predominantly a commercial area. However, because of its location on the A63 and the traffic congestion in the area, the air quality is relatively poor.

The site is considered to be of great importance for developments that will attract people into the city centre (Author interview: Local Authority Major Projects Manager - HP1, May 2018). However, this has not always been the case, as 15 years ago it was viewed as being on the fringe of Hull, since it was part of the red-light district and so few people visited unless they had a specific reason (Author interview: Local Authority Planning Manager - HP2, June 2018). After the construction of the shopping centre in 1991, the area fell into disuse and became derelict, as its original purpose was a predominantly warehousing area for the Princes Dock. Thus, when the dock closed the area continued to contain a number of these buildings, and indeed some still remain. For some people, these buildings are considered to have a maritime heritage value (Author interviews: Local Authority Planning Manager - HP2, June 2018 and Environmental Forum Coordinator - HP4, June 2018).

The Hull Bonus Arena opened in August 2018, with enhancement to the public realm within the immediate vicinity, and the Princes Quay Shopping Centre is remodelling its ground floor to provide a food and beverage services for Arena customers (Author interview: Regional Director, Property Developer – HB4, October 2018). The public realm improvements consist of some street furniture and hard landscaping and although the area is accessible by foot, car access will be enhanced once work on the A63 is completed.

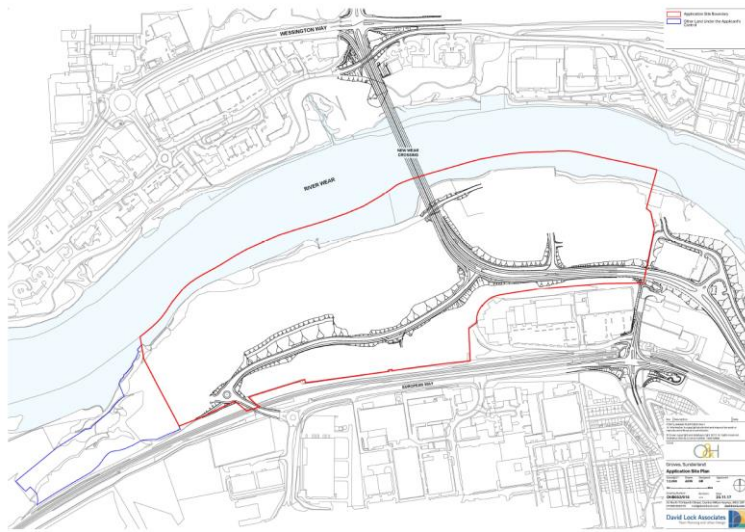
Northern Spire Development Area⁶, Sunderland

This site is on the southern bank of the River Wear adjacent to the Pallion Retail Park, and on a steeply sloping forming part of the River Wear gorge, with a change in level of some 30m from the top of the site (adjacent to the Metro line) to the water's edge.

The site overlooks Castletown on the northern bank and is located 3km west of the City Centre. Access to the area is via a single road, which also provides access to the Retail Park.

⁶ Information drawn from Northern Spire Area including the former Groves Site Review

Figure 7-14 Location of Northern Spire, Sunderland



Source: Planning application submitted 20/12/17 accessed 28/4/18

Low Pallion, the area where the former Groves site is located, was mainly a residential area constructed in the 1920s to provide housing for those working in the Shipyards. However, the housing was generally of a low standard with limited amenities. Using slum clearing powers granted through the Housing Act, 1930, the local authority was able to compulsorily clear the land in the early 1940s and rehoused residents elsewhere in the town. The cleared land was left idle to provide an option for shipyard expansion. Unfortunately, there was no demand for this and so the land was used for the development of the Crown Engine Works, by Coles Cranes in 1946. This site subsequently went into liquidation in 1984 and was purchased by Groves in the same year. The Groves site closed in November 1998 and since then the site remained derelict until 2015.

In 1999, the Sunderland Partnership, which included the City Council and Sunderland ARC, applied for SRB funding for the Ford and Pallion area, part of which would be used to revitalise the area with the possibility of attracting a centre for hi-tech firms, other industries and offices. However, the site owners were considering options that included the reuse of existing buildings. Neither of these options were progressed.

The Pallion Metro Station was opened in 2002 as part of the Tyne and Wear Metro extension to Sunderland, and the line essentially cut across many of the access routes to this site, leaving just the one access road.

In 2004, a planning application for 1,500 residential dwellings and 10,000 sq. m of office space, some retail and commercial space, along with a school and a hospice was submitted and approved, but the application was withdrawn in 2007. Although no reason for this withdrawal was given, the fact that Sunderland Council were committed to a river crossing, that would land nearby, may be part of the reason.

To alleviate the access issues, the site is being opened up to make it more attractive for development as part of the Sunderland Strategic Transport Corridor (SSTC). A significant element of the development has been the Compulsory Purchase of the necessary land. This development aims to create a better road link between Nissan, the developing International Advanced Manufacturing Park and the Port of Sunderland, and includes a new river crossing, The Northern Spire. The SSTC is being built in 6 phases, with phase 1 being St Mary's Boulevard, the dual carriage way running past the Vaux site, which was completed in December 2014. Phase 2 which includes the river crossing, commenced in May 2015 and was completed in Autumn 2018.

The site is designated in the Local Plan for a comprehensive mixed-use development, and a development framework was produced in 2011 (David Lock Associates, 2011). It highlighted the location overlooking the river as an asset but considered the landscape characteristics of the site as presenting challenges for development. The site is close to the River Wear wildlife corridor and is likely to contain contaminants from its previous industrial uses.

The Northern Spire Development Area is located in an economically and socially deprived neighbourhood of the city. Unemployment is high and a significant proportion of residence suffer from fuel poverty. Housing in the area is considered to be in relatively poor condition but air quality, presumably because of its riverside location and, until recently, isolated position, is relatively good. These factors could also explain why few stakeholders have a view about the site itself.

Land in these areas is in multiple ownership, but the Local Authorities have been proactively buying land and property as required to enable developments to progress. Some of this has been through Compulsory Purchase Orders and others from negotiation with the previous owner (Author interview: Local Authority Planning and Regeneration Manager – SP1, February 2018).

Both of these developments have created residual space around them, with some vague plans about how they might be utilised. In addition, they have not addressed the redundant spaces in the surrounding area, and the expectation from the Local Authorities would appear to be that these major developments will act as a catalyst to attract private sector investment – yet as of December 2019 no additional development has taken place. Their geographical locations could impact on the likelihood of development. The area around the Hull Bonus Arena is city centre based, positioned close to businesses and some residential areas. It is part of the City Council's priority for improving the city centre, in terms of both employment and housing. By contrast, the area around the Northern Spire in Sunderland has little by way of amenities. In Hull, the redevelopment of the area will be facilitated by the City Council through their purchase of specific buildings, enabling a de-risking of the investment by the private sector. However, in Sunderland the development is expected to be private sector driven, which will inevitably mean an economic basis for the valuation of the site's development potential. Although the proposed neighbourhood in the nearby area will potentially bring some social and environmental benefits, it will be a long time before these come to fruition.

Piecemeal developments are those that did not begin with an overall plan for what they have become and have developed incrementally as opportunities arose. The two sites considered here – the Rainbow Community Garden in Hull and the MAC Quarter in Sunderland – are highly contrasting, as one is a small-scale community led development and the other is a larger scale, private sector charity led development.

Rainbow Community Garden⁷⁷, Hull

The garden is located in North Hull Estate, just off Evesham Close. Endike Lane is to the south, Greenwood Avenue to the east and 5th Avenue to the west.

Figure 7-15 Location of Rainbow Community Garden, Hull



Source: Digimap accessed 18 June 2018

A number of people on the estate had applied for allotments and been refused, and so the HAT officer thought that the local community could use this space as a community garden (Author interview: Community Asset Coordinator, Rainbow Community Garden - HC2, July 2017). Permission was granted by the HAT and the Local Authority for this to proceed, so long as they did not acquire ownership. A local charity that the HAT already supported agreed to be responsible for the space but did not want any active engagement. Therefore, volunteers were recruited to clear the site and the HAT agreed to undertake some essential hard landscaping and assist with heavy clearing. A small amount of funding was made available in packages of £500-£1000 at a time to pay for plants and equipment.

In 1999, the HAT was wound up and the HAT officer took on the role of coordinating the activities of the space on a voluntary basis. With volunteer labour only, the garden began to take shape, at which point the holding charity began to take an interest but wanted to take it in a different direction from those who had worked on it. It was decided that a group of the volunteers would set the community garden up as

⁷⁷ Information drawn from Rainbow Community Garden Site Review

an independent charity, which took 7 years to achieve. The image below shows the location of the garden within the surrounding area, clearly illustrating the relationship with the surrounding houses.

Figure 7-16 Ariel view of Rainbow Garden, Hull



Source: Google Earth accessed 18/6/18

In 2015, an area of land attached to one of the houses adjacent to the garden became surplus to the requirements of the current owner, and so this was given to the Rainbow Garden, and they incorporated it within their boundary (Author interview: Community Asset Coordinator, Rainbow Community Garden – HC2, July 2017).

The North Hull Estate is a very deprived area of Hull, characterised by high levels of unemployment and low levels of economic activity amongst the population. The health of local residents is relatively poor and there are high morbidity rates. In addition, housing conditions are not good across the area and fuel poverty is high.

The garden is not well known outside of the immediate neighbourhood but some of its funding comes from the Rank Foundation, who use the garden as an example of their community engagement. As a result of this publicity, the garden coordinator and staff have been asked to engage the community in keeping small patches of green spaces across the area in good order, and they have also been given small nearby allotments for use by the community.

Music, Arts and Cultural Quarter (MACQ)⁸, Sunderland

This site is part of the Bishopwearmouth Conservation Area in the north-west of the City Centre. The MACQ site has High Street West to the south, Livingstone Road to the north, Keel Square to the west, and St Michael's Way to the east. It is also part of The Minster Quarter Master Plan area.

The image below shows the area and the collection of buildings that make up the space. It consists of the Edwardian buildings of the Empire Theatre, Dun Cow and Peacock Pubs, Old Fire Station, and the Magistrates Courts. The former Gill Bridge Police Station is an example of 1970s brutalist architecture and is interconnected with the Courts. Gill Bridge House, which was a former inland revenue office, was built in 1980s on the site of a former public baths. Other buildings in the area consist of DWP offices that are still in use and a number of Edwardian and Victorian Buildings on the same street as the Empire Theatre. These are currently occupied by a number of businesses utilising the ground floors only, of three- or four-story buildings. So, in these cases the redundancy is in the upper floors.

The map below shows the configuration of the buildings in this area:

⁸ Information drawn from MAC Quarter Site Review

Figure 7-17 Location of MACQ, Sunderland



Source: Digimap. Accessed 20/2/18

Although there is clearly a significant number of redundant buildings and space in this area it is considered to contain, along with the wider conservation area, some of the city's most attractive architecture (Author interview: MAC Trust Board Member – SB4, July 2017 and Local Authority HAZ Project Coordinator – SP2, February 2018). Most of the architecturally significant buildings were built within a 10-year period of one another from 1902. The area was bombed in 1943, damaging the Empire Theatre and the Dun Cow Public House, demolishing a warehouse and some shops. The theatre and pub were restored, but by the 1960s the buildings in the area had a very dilapidated appearance and needed attention.

The Empire Theatre is an impressive Edwardian Building with Grade II Listed Status, designed by W.M and T.R Milburn. It offered a host of smaller scale shows, pantomimes, live bands and cinema performances and it continued to withstand competition from Television in the mid-1950s. However, by the end of the decade it was struggling financially and thus was bought by the Town Council and still remains under the ownership of the City Council.

The theatre was extended in 2002 to enable it to host major London West End shows; the only theatre in the North East with the scale and infrastructure to do so. However, this changed the nature of their operation, and they no longer offer performances by live bands and smaller performances.

The Dunn Cow pub is a Grade II Listed building designed by Benjamin Simpson. It is suggested that some of the features of this pub influenced the design of the theatre. Although, severely damaged in the Blitz, it was restored but the buildings around it were not.

The fire station was opened in 1907 as a response to the previous fire service provision being unable to respond to the Great Fire of Sunderland in 1898, that destroyed 48 businesses in the Town. It contained some innovative features: for example, the door opening mechanisms, and it was of national significance within the Fire Service estate. However, due to changes in requirements within the Fire Service, the station was closed in 1990 with the services being located to other stations across the City. Some external hoardings were put up at the windows and across the doors, and some of the building was used to store equipment. In the main it stood empty until 2012, when the MAC Trust purchased it with the aim of turning it into an entertainment and performance space, as part of a new Cultural Quarter within the city.

The Londonderry Hotel was built in 1901/2 and designed by Sunderland architect Hugh Taylor Decimus Hedley. It replaced an earlier pub of that name and commemorates the Irish-titled Marquess of Londonderry, a coal owner who dominated much of the coal trade around Sunderland in the nineteenth century. In 2017, this building was renamed 'The Peacock'.

Gill Bridge House was originally the site of a public baths constructed in 1890, and subsequently converted into a public swimming baths, which closed to the public in 1978 when Crowtree Leisure Centre opened. It continued to be used by schools until the mid-1980s when the building was demolished, along with a number of other buildings and a car park temporarily located there. The impressive Portico was kept and incorporated into the existing Gill Bridge House building in 1992.

This building housed the offices of the HMRC, despite Gordon Brown selling off public buildings, including this one, in 2009. It was then bought by an investment fund which subsequently went bankrupt, and the building is now in the hands of the receivers. HMRC moved out and located to Washington in 2014 and so the building was empty, but they still had the lease on the offices and continued to pay the rent until about September 2017. Thus, although to the general public it was an empty building that no one was interested in, from the owner's point of view it was still bringing in rent.

Sunderland Magistrate's Court was built in 1907 and also housed the Police Station. Although its functions have changed over the years, there have been many discussions, going back to the 1990s, about closing these courts and building a new one elsewhere within the City. The Ministry of Justice currently have an option on a site on Farringdon Row, but since the cuts in public sector funding in 2010 onwards there has been no movement on this. Currently the County Court functions that were on Fawcett Street have been moved to this building.

After the reorganisation of police services across the city and the centralisation of officers to a building on the north of the River Wear, the Gill Bridge Police Station building was bought in 2016 by the City Council as a development site, with the aim of demolishing the building and reusing the land. However, the Police Station is linked directly to the Magistrate's Court via an underground tunnel, and the station yard houses a number of secure parking spaces for the Magistrates. The City Council realised that any new building on that site would need to have the same footprint as the original building and so the options may be somewhat limited (Author interview: Local Authority Planning and Regeneration Manager -SP1, May 2018). A private developer is interested in utilising the building and the City Council submitted a planning application for change of use to business and leisure uses in 2017, which was approved (Author interview: Property Developer – SB3, November 2017). The final building in the block is Wear View House currently occupied by DWP. It was built in 1995/96 and is a suite of offices, with underground and on-site parking spaces.

Although the MAC Quarter had the anchor tenant for the Empire, the development of the Fire Station is intended to enhance the arts and cultural offer within this part of

the city. It is recognised that an individual building is not really attractive to policymakers and funders, and it needs to be part of a wider development. Thus, it is intended that there is a close association between the MAC Quarter and the Vaux Site. To make that spatial link, Keel Square was created on an area that was residual to the development of St Mary's Boulevard (Author interview: Local Authority Principal Landscape Architect – SP3, January 2018).

These plans have been broadly welcomed, but there is a concern that they may cause a redistribution of activity towards this area of the city centre, displacing people and businesses from elsewhere across the city (Author interview: BID Operations Manager - SB6, January 2018). The area itself is considered to be a bit arid because of the redundant buildings and the limited flow of people into the occupied buildings. (Author interview: Local Priest - SC2, March 2018); but the counter view is that because there are firm plans, particularly for the former Fire Station, then this is encouraging others to invest (Author interview: Property Developer – SB3, November 2017 and Local Authority Executive Director for Economy and Place - SP4, October 2018). There are no residents living in the immediate area but the site's location near St Mary's Boulevard means that the area suffers from poor air quality.

The Rainbow Garden is owned by a charity, but the MACQ area has a mix of ownership including a private sector led charitable trust, private sector and public sector owners – however, they are working together towards a broad vision for the area.

Although these two very different sites share the characteristic of having a piecemeal approach to their development, they are very difficult to compare otherwise. The Rainbow Garden is on a peripheral housing estate aimed at building social capital amongst the community in the surrounding neighbourhood to improve their health and wellbeing. The financial resources available to them are very limited, and they rely heavily on charitable contributions. This project is actively improving the environment in the area through the enhancement of green space whether this be in the garden itself, the surrounding amenity green space, the allotments or the orchard. The MACQ is of a completely different magnitude and is very much orientated towards property development relating to arts and culture. The focus is on

culture led economic development and the businesses operating in the area are seeking an economic profit. Although part of the development is led by a private sector charity and the hope is that the city will derive some social benefit from this development, it still has a commercial outlook and no consideration is being given to enhancing the environment with green infrastructure, preferring instead hard landscaping. Another major difference is that the Rainbow Garden is not really integrated into the priorities of the Local Authority, whereas the MACQ is central to the Cultural Strategy in Sunderland and a priority for the City Council.

7.5 Land ownership and the implications for development, issues of private and public ownership

The case study sites have a number of ownership models, but there is no clear configuration that means projects are progressed or not. If sites are in Local Authority ownership, then they can facilitate infrastructure works to make sites more easily accessible and make it easier for the private sector to bring forward plans for development (Author interviews: MAC Trust Board Member -SB4, June 2017; Chief Executive of SPV Development Organisation SB5, December 2017; Local Authority Planning and Regeneration Manager - SP1, Regional Director, Property Developer – HB4, October 2018; Land Manager, City Council Development Partner - HB5, June 2018 and Local Authority Planning Manager - HP2, June 2018). Private ownership can vary considerably, with those who work closely with the planning authorities and with the grain of the Local Plan allocations, progressing developments more smoothly (Author interviews: Director of Policy, British Property Federation - NP6, December 2018; Local Authority Planning Manager - HP2, June 2018 and Local Authority Planning and Regeneration Manager - SP1, February 2018). However, they can also act as a barrier, in instances where proposals are made for developments that run counter to the prevailing planning regulations and Local Plan site allocations, or by land banking sites in the hope with other developments taking place within a particular area will increase the value of the land that they own. There is also a counterview that Local Authorities often hold on to land for future development purposes, such as housing allocations or other major projects, limiting the opportunities for private developers (Author interview: National Planning Organisation Regional Policy Lead - NP3, January 2018), and slowing

down developments within an area. central government is pushing for local authorities to offer their most developable land and property to the private sector in order to reduce the constraints on development, particularly relating to housebuilding (Author interviews: Director of Policy, Town and Country Planning Association - NP4, September 2018). Nevertheless, within Hull and Sunderland, there is limited interest from the private sector and so Local Authority ownership of the land or property is the only way to progress developments (Author interview: Local Authority Planning Manager - HP2, June 2018)

Where the landowners are located can impact on whether land and property are developed. In both Hull and Sunderland, according to Shrubsole (2019), a proportion of the land is owned by overseas based companies who are only interested in these as an asset with an income stream. Some of these owners may appoint property management companies to look after their interests, and in some cases such as Princes Quay Shopping Centre in Hull, develop these assets further (Author interview: Regional Director, Property Developer – HB4, October 2018). These organisations act as a conduit between the owner and the local planning authority and can facilitate further development.

Who owns the land and property and their purpose for doing so, is clearly an issue illustrated in the case study sites. Whether they are owned for development specifically or as an asset with an associated income stream, can influence an investor's decision to engage in a particular location, depending on their expectations of the financial return they are likely to receive.

7.6 Land values as a limiting factor to development

Both Hull and Sunderland have relatively low values for both housing and employment land (Author interview: Local Authority Planning Manager - HP2; Local Authority HAZ Project Manager - HP3, July 2018; Chief Executive of SPV Development Organisation – SB5, December 2017 and Local Authority Planning and Regeneration Manager - SP1, February 2018), and as illustrated in Chapter 5, private sector developers looking for a particular level of return on their investment may be put off by this. Both Hull and Sunderland find it very difficult to attract major house builders into their respective cities to develop on brownfield land, and prefer to

invest in greenfield sites, where there are no remediation costs and where the public sector has invested in the necessary enabling infrastructure.

Because both Local Authorities have economic development as their priority, they are looking to engage private sector investors in projects within their cities. However, where some sites are difficult to develop or where proposals have been put forward, they are unlikely to meet the needs of the city or its neighbourhoods or will not give the return that investors are looking for.

7.7 Conclusions

The factors that have led to the creation of redundant spaces in Hull and Sunderland are multifaceted, but are broadly a result of economic restructuring due to de-industrialisation and international competition during the 1970s and 1980s; changes in residential preferences in terms of location and the nature of the dwellings since the post-war period; and public sector restructuring following the turn to austerity after the financial crisis in 2007/8. These processes result in redundant spaces with differing characteristics. However, the narrow economic and financial frameworks of valuation have constrained the options considered for these sites, and have reinforced their redundancy pathways, creating entrenched path dependencies that over time have exacerbated the problems, making them harder to develop.

Although vacant land has been an important component in the regeneration of cities for some time, the priority for its use has firmly shifted towards housing and away from employment use. However, the need for Local Authorities to ensure the viability of sites within their Local Plan, acts as a constraint on sites being brought forward for development. The location of multiple redundant spaces is in areas with relatively poor environmental conditions in both cities, whilst in Hull poorer social conditions are more prevalent than in Sunderland. However, poor economic conditions are more likely to be associated with multiple redundant spaces in Sunderland than Hull. Although, it is worth pointing out that lower economic vitality in an area can impact on social outcomes.

Even if a Local Authority wished to have an increased focus on redundant space, the requirement to reflect the priorities set out in the NPPF in determining planning

decisions, would mean that they would open themselves up to challenges from developers if proposed projects were refused. Also, if developers believe that the financial cost associated with a specific development will make the project unviable, i.e., will not yield an appropriate level of economic return but they have a development idea, then they can appeal for a site elsewhere in the area, even if it has not be designated for that use in the Local Plan. This means that some redundant spaces will remain in that state because of the preference for an alternative site.

The existence of vacant land and property is not an issue in itself, it is when these become redundant and begin to impact upon economic, social and environmental well-being. The prevailing socio-economic and environmental conditions in the area can be a barrier to their development, and these can also influence land values negatively making them less attractive to investors and developers. Having planning authorities identify particular areas as a priority for development, does not necessarily lead to these areas being developed – as illustrated in section 7.6.

In addition, the characteristic of the development process for sites does not necessarily lead to the desired outcome for the area. Because of a narrow focus on market based financial returns, opportunities to enhance social and environmental wellbeing are often not explored, reducing the number of options available to progress these sites.

Finally, ownership and land values can be limiting factors to the development of redundant spaces because of the economic returns that are sought. Therefore, it may be the case that Local Authorities need to take more of a leading role to facilitate the development of these sites, particularly in weak market cities like Hull and Sunderland.

Chapter 8. The contributions of reused redundant spaces to spatial equity in Hull and Sunderland

8.1 Introduction

This chapter aims to consider how reused redundant spaces can contribute to addressing spatial inequity within the post-industrial cities of Hull and Sunderland. To do so, case study sites from these two cities will be assessed for their potential contribution, through considering actual or proposed interventions and their anticipated outcomes. Some of these will relate to the aspirations for the site rather than guaranteed outcomes due to the uncertainties surrounding the developments, as a consequence of the weak market conditions operating in both cities and the desire to attract private sector investment.

The outcomes considered are how the developments on these redundant spaces contribute to enhancing human activity and well-being within each city; and how these interact with the wider environment, as in the concept of sustainable development postulated by (Giddings, Hopwood and O'brien, 2002). Considering spatial equity in the two case study cities raises questions about land management interventions, in particular the issues related to the enhancement of its use, where use refers to the ways in which land can be developed including public amenities and facilities, housing and offices or green space (Achmani *et al.*, 2020). In addition, such developments need to be accessible in order to enhance interactions between people and overcome spatial segregation (Hansen, 1959). Bringing these ideas together will provide a heuristic for evaluating their contributions.

Figure 8-1 Framework for considering contribution to addressing disparities in spatial equity

Enhancements to:	Human activity and Wellbeing	Links to the environment
Amenities and facilities		
Greenspace/ Infrastructure		
Housing		
Offices		
Accessibility		

Source: Author's own

There is a clear focus in Hull and Sunderland on the development of the city centres, and a key rationale for this has been to attract more people to live within the city centres. This is due in part to the recognition that retail offered in city centres, particularly in cities like Hull and Sunderland, is in decline. However, people do not just decide where to live based on the availability of housing; their decisions also depend on the amenities and services available to them in the area and whether it offers the lifestyle that they seek. This particular focus on city centre development offers sites that tend to be easier to develop as they are less likely to be redundant; however, as shown in Chapter 7, spaces that require intervention are present in both Hull and Sunderland.

Attracting more people, whether to live or work, can alter the dynamic of an area and induce a multiplier effect to the benefit of businesses selling goods and services. It may also stimulate opportunities for additional activities to be delivered, thus offering a greater diversity in terms of what an area has to offer. This adds to the vitality of an area, depending on how accessible it is to a wide range of people, especially those from more deprived parts of the city.

8.2 Contribution of case study sites to addressing spatial inequity

This section considers how eight sites across Hull and Sunderland contribute to enhancing green space, the development of facilities that offer additional services to the area, as well as new housing or office space. Originally, most of these developments would have been funded by their Local Authorities, however, since the 1980s and with the greater involvement from the private sector, they have increasingly been developed through public-private partnerships.

8.3 Additional amenities and facilities

Vacant land and property may be considered as raw material mines for new projects, but the conservation of original fabric and structures is considered a more sustainable approach to reuse (Aigwi, Egbelakin and Ingham, 2018). This latter approach can also contribute to improving the economic, socio-cultural and environmental conditions of areas requiring regeneration (Bullen and Love, 2010) and of existing buildings, including heritage buildings. Across the case study sites, there are some landowners that are aiming to safeguard or repurpose buildings, whilst others have demolished them, leaving no trace of the former uses of the site.

Three of the case study sites, one in Sunderland (Music, Arts and Cultural Quarter - MACQ) and two in Hull (St Andrew's Dock-Lord Line site and the Fruit Market Area) have or possibly plan to safeguard and repurpose buildings with heritage value.

The two main buildings in the MACQ being repurposed are the former Fire station and Police station. Over the 20 years of abandonment, the physical fabric of the building had deteriorated and some of the previous alterations, for operational purposes, had altered the building from its original design. The aim is to undertake a historically sympathetic redevelopment, restoring many of its original Edwardian features using traditional methods (Author interview: MAC Trust Board Member – SB4, June 2017). Although this was intended to improve the aesthetics of the building, it was deemed that it would contribute nothing to enhancing the cultural offer in the area, and thus the interior of the building needed to be remodelled. The downstairs is intended to be redeveloped as a bar and restaurant, aimed at providing a distinctive offering from the 'vertical drinking' establishments operating elsewhere

in the city, to encourage more people into the area on a regular basis. The cultural component of the building will be located upstairs, which will house a dance company and a theatre company that will offer workshops and give performances. Outside the fire station, a performance space is being developed to accommodate larger audiences and different types of performances to be staged. A new auditorium will also be developed, filling a void in both physical and cultural terms by utilising some adjacent redundant space and enhancing what can be offered within Sunderland. The auditorium will host concerts, dance performances and plays. When not being utilised in this way, the facilities will be offered to community groups to host cultural activities, which will build on the Cultural Spring (Author interview: MAC Trust Board Member – SB4, June 2017).

Although the development of this site is in line with the plans of the Sunderland Cultural Partnership, it was led by the MAC Trust, which had taken on the role of developing property on behalf of the Partnership. However, an individual member of the MAC Trust Board was instrumental in the development of this site, due to holding prominent roles on the city's Economic Leadership Board, University's Governing Body and being a board member of a number of Newcastle based arts organisations. They used this influence to attract financial resources and organisations to support the development and delivery of this site. The priority for the work on external structure of the building, was to return it to its original Edwardian appearance, while internally the redesign focused on providing facilities to enhance the cultural offering in the area. It has been recognised that this venue may initially struggle to be financially viable, and that the profits generated from the two adjacent pubs, which are owned by the same individual, will be used to support the running costs of the Fire station. Thus, although this development has been private sector led, the outcomes being pursued are more social than economic.

The existence of the Fire station and the initial activity on the nearby Vaux site, has stimulated interest in the development of the former Gill Bridge Police Station. Built in the 1970s brutalist architectural style, it ceased operation in 2015 and was subsequently purchased by Sunderland City Council. They planned to demolish the building to create a vacant development site; however, because the police station and the Edwardian Magistrate's Court next door were inter-linked by the cells and

the magistrate's secure carpark, any new building on the site would need to have exactly the same footprint. At the end of 2017, a property developer agreed to buy the Police Station and turn it into a business centre intended to house an eclectic mix of creative businesses. As well as offices, it will house workshops and an events space on site, and longer term may have a café-bar on the roof (Author interview: Property Developer – SB3, November 2017). The developer commented on the suitability of the site: *'The location for Station H (the new name for the building) is perfect for the growth in the city – central to Keel Square and the emerging Sunderland Music, Arts and Culture (MAC) Quarter and opposite the Vaux site.'* (Evening Chronicle 28//12/17).

This highlights that once development begins to take shape; it can stimulate other investment in areas that have hitherto struggled to attract interest. The aim of Station H is to provide a complementary offer to the developments on the Vaux Site, to increase the number of businesses and footfall in the area, in order to improve the area's vitality through the diversification of the business base (Author interview: Property Developer – SB3, November 2017). This project's progress has been delayed because of the construction of the extension to Garden Way, which will create a new road through the MACQ to link it with St Mary's Boulevard – a project that is being led by Sunderland City Council.

Being private sector led investments has meant that these projects have been able to progress relatively quickly. The Fire station has been developed in line with the City Partnership's plans to develop Sunderland's cultural capital. The MAC Trust have taken a leading role to develop property as part of the Cultural Partnership, and the fire station is one of a number of buildings that they have safeguarded in the area, including two Edwardian Pubs that have been refurbished. The external appearance of these and other buildings in the area will be enhanced through funding from Historic England for the Bishopwearmouth Townscape project (Author interview: Policy Advisor, Historic England - NP7, January 2018).

The development of the police station is an entrepreneurial response to a potential increase in the vitality of the area and the availability of a property that meets their aspirations (Author interview: Property Developer – SB3, November 2017). It builds on a portfolio of projects that the developer has elsewhere in the region, and they

have a long-term commitment to this building and will modify the internal structure as tenants begin to occupy the spaces. The emphasis of this development will be to repurpose a municipal building towards a function that is more in line with the new focus of this area of the city.

The Fruit Market area in Hull, after a number of proposals to demolish large parts of the area and redevelop it by Hull Citybuild and Hull Forward respectively, has been undergoing a heritage sympathetic redevelopment of the former warehouses. The Humber Street area now offers a location for creative practitioners to set up shop alongside independent retailers, bars and restaurants, providing a very different offer for consumers than other parts of the city, and is attracting people from within the City and beyond. This form of redevelopment is bringing in 'the East Riding Pound' (Author interview: Environment Forum Coordinator – HP4, June 2018) to the area, and the buildings are being incrementally refurbished in line with demand from businesses wishing to locate within the area. In essence, historical buildings are being safeguarded and repurposed, rather than eliminated.

The Lord Line building at St Andrew's Dock in Hull has an uncertain future, indeed it is still unclear as to whether or not the building will be repurposed. Currently, there is an approved planning application to turn the lower floors in the building into a restaurant and bar. However, the application has no access road or parking proposed, presumably because ownership of the land lies with someone else, which limits the viability of the project as the current accessibility of the site is very poor for the general public. The landowner has developed a counter proposal for a heritage dock, which places the Lord Line Building as its centrepiece. This proposal is likely to be welcomed by some of the surrounding community, as it is intended to celebrate the fishing industry associated with the area. However, it runs the risk of running into similar issues to the current planning application, as the landowners do not own the buildings.

There are calls from a local councillor for the proposed cruise launch at Victoria Dock, to be located here instead. Although this would bring a significant number of visitors to the area, it would mean that the existing buildings would be demolished as they would fail to meet the operational requirements of this development.

Clearly from a property safeguarding or repurposing perspective, the potential outcome from these various proposals remains unclear. However, there are major development sites where structures possessing some industrial heritage value have been completely demolished. In particular, all of the brewery buildings were cleared from the Vaux site following its closure in 1999 – this despite some people feeling that buildings such as the bottling hall, should be retained and converted into a museum (A Passion for Vaux, 2019). Similarly, a number of buildings related to the Princes Dock, particularly warehouses, were demolished to make way for the development of the Hull Bonus Arena, leading to the loss of industrial heritage relating to the former shipping activities in the area (Author interview: Environment Forum Coordinator – HP4, June 2018). Although attempts had been made to get some of the buildings listed, particularly Braves Hall, this effort was unsuccessful. Other buildings that were demolished in this area include a former Ambulance Station built in 1958, which ceased operation in 2009. In this case, it was considered that the scale and condition suggested it could have been repurposed. However, this did not fit with the City Council’s plans for the area, which were focused on the development of the Bonus Arena.

The former paper mill site in Sunderland successfully achieved a change in use from industrial to housing land and, from the site owner’s perspective, gaining planning permission for housing increased the economic value of the land from its previous industrial use. However, the clearing of the site removed structures built between 1923 and 1939 that had industrial heritage significance, and while they were not listed, some of the people living in nearby housing estates had an emotional attachment to them, having either worked at the paper mill or had relatives who had worked there (Author interview: Area Community Development Coordinator – SC4, December 2017). Thus, clearing some these buildings will negatively impact on the social value of the site. Although the Local Authority want additional housing across the city, this change of use would seem to be at odds with the long-term focus for the area, as it is seen as part of one of the most significant areas of employment land, after the Vaux site, in Sunderland (Author interview: Local Authority Executive Director for Economy and Place - SP4, October 2018).

Although the repurposing of land and buildings can bring economic, social and environmental benefits within the neighbourhood they are situated in, the demolition of buildings can lead to a loss of heritage or social value from the same location. Therefore, how the land and property is safeguarded or repurposed will have a different impact on the spatial equity of the area. However, within the examples above, the reconfiguration of these spaces contributes little to the environmental value of their respective areas.

Both Hull and Sunderland consider culture to be an important component in the future development of their cities. Hull's 2017 City of Culture bid showcased the importance of cultural activities in improving economic and social wellbeing (Bianchini, 2018) – and this is recognised within the Sunderland Cultural Partnership (Author interview: Cultural Animateur - SC5, January 2018).

The Hull Bonus Arena clearly enhances the cultural capital of the city centre, providing a performance venue that can offer performances that theatres across the city cannot provide. It also offers a substantial conference space that will bring different groups of people into the centre of Hull. The Music, Arts and Cultural Quarter in Sunderland aims to achieve similar outcomes, particularly once the Auditorium is completed, but the fire station already offers Dance and Theatre participatory activities. The two refurbished pubs, The Dunn Cow and the Peacock, offer a range of musical performances, all in addition to the West End performances hosted by the Empire Theatre. However, concerns have been raised that the concentration of venues in this area has displaced activities from elsewhere in the city (Author interview: BID Operations Manager - SB6, January 2018).

The Fruit Market Area in Hull has a range of galleries that host exhibitions and small-scale performances and the pubs in the area hold a number of gigs for local performers. Across at the C4D building, there is an outside amphitheatre for outdoor performances. However, while its use is weather dependent, it proved very popular during the summer of 2017, when events were held there as part of the City of Culture programme.

There is a possibility that if the Heritage Dock proposals at St Andrew's Dock are developed, then this will add to the fishing industries heritage assets – alongside the

Maritime Museum in the City Centre and the Bull Nose Heritage Centre on Hessel Road.

However, the demolitions that have taken place on the Lord Line site in Hull and the Vaux site in Sunderland in particular, have diminished opportunities for developing cultural assets.

8.4 Green Space/Infrastructure

Enhancing the green space in a city can bring multiple benefits that contribute to spatial equity through the creation of mutually reinforcing interdependencies between water, transportation, energy, and health (Staddon *et al.*, 2018). These benefits include storm water management; improvements to air quality by removing pollutants; reduction of greenhouse gases, odour and noise control; and mitigating urban heat island effects (Staddon *et al.*, 2017). In addition, it can improve the urban aesthetics, perceptions of neighbourhood quality and provide recreation opportunities and contribute to social cohesion (Staddon *et al.*, 2018)(Staddon *et al.*, 2018).

Hull's Rainbow Community Garden was created from residual land resulting from adjustments made to garden lengths in former Council Houses. The Rainbow Community Garden provides a resource within a deprived area of Hull, engaging local people of all ages in a range of horticultural activities. The creation of the garden enabled volunteers drawn from local residents to learn new skills relating to landscaping, planting and construction – some of which they could then apply in their own gardens. Over time, however, the scope of activities taking place in the garden has expanded to enable them to offer work experience to apprentices, the unemployed and ex-offenders, as well as to provide a supportive environment for those with mental health issues to engage in some meaningful activity (Author interview: Community Asset Coordinator, Rainbow Community Garden - HC2, July 2017). This has been further expanded to support volunteers to improve amenity green spaces around the housing estate, managing allotments on a nearby site and the creation of an orchard. These latter two ventures provide fresh fruit and vegetables, which are then sold at a discounted price to the local community in an attempt to improve the diets of local residents.

The garden contributes to improved community cohesion by bringing together people from various parts of the estate, across age groups together, who may not engage with one another at any other time, to partake in productive activities. For some, this gives them a sense of pride in their endeavours, improves the amount of physical activities that they engage in and supports enhanced wellbeing amongst garden users (Author interview: Community Asset Coordinator, Rainbow Community Garden - HC2, July 2017). It also improves the quantity and quality of green space, both within the garden and the surrounding areas for people to enjoy. Despite the positive contribution this project makes to the local community, it is not well known to many Council officials and therefore struggles to attract funding from Council sources. Instead, it relies on grants from charitable trusts, particularly the Rank Foundation, who have provided funding for the last 9 years (Author interview: Community Asset Coordinator, Rainbow Community Garden - HC2, July 2017). In exchange, the Rank Foundation use the garden as an example of their Corporate Social Responsibility (CSR) activities in publicity material.

This community garden was originally created by the coordinator in response to issues relating to the health and wellbeing of the local residents. It initially aimed to improve the skills and knowledge of the community, and to encourage greater social cohesion within the neighbourhood. Because the garden has a predominantly volunteer workforce and the manual nature of the horticultural activities taking place in the garden, development has been incremental. The evolution of this space has been driven by the vision and energy of the coordinator and has taken on additional activities only when the coordinating committee have considered there to be sufficient capacity, in terms of volunteers and financial resources and an interest from the local community (Author interview: Community Asset Coordinator, Rainbow Community Garden - HC2, July 2017). Although the Coordinator believes that they could attract additional funding and extend the activities they offer at greater pace, this often comes with the need to achieve outcomes that would detract from the core aims of the garden.

The Vaux site in Sunderland has, over the course of its long dereliction, had temporary greening interventions installed on it on a number of occasions, with the intention to improve the site's aesthetics, which was considered important because

of its prominence in the city centre (Author interview: Local Authority Principal Landscape Architect – SP3, January 2018). However, because of its transitory nature this intervention did not really contribute to the green infrastructure of the city, as it lacked the longevity to be linked in with wildlife corridors or integrate with other green spaces nearby.

The image below shows 'The Beam', the first building to be erected on the Vaux Site. It clearly illustrates the hard landscaping around the building, which is functional and aesthetically uncontentious, while the green space constituting grassland areas and trees, is minimal. However, the structure has been built with a central atrium which enhances air flow throughout the building, keeping the upper floors cool and reducing the need for air conditioning, thus improving the building's energy efficiency. While this provides a form of built green infrastructure, whether or not the other buildings on the site will contribute in this way remains to be seen.

Figure 8-2 'The Beam' on the Vaux site, Sunderland



Source: <https://www.chroniclive.co.uk/business/business-news/sunderland-aiming-attract-half-billion-16015752> accessed 12/6/19

One of the options for temporary uses of the site as it is being built out, is the opportunity to provide urban growing space and educational programmes tailored towards sustainable living and growing food (Cundall, 2017). The programmes would be made available to a variety of groups within the community including local schools, young people and individuals, and could assist with developing a sense of community ownership for the site, rather than just being seen as an office park (Author interview: Chief Executive of SPV Development Organisation – SB5, December 2017). However, the greatest contribution to green infrastructure could be the linking of this site, via the launch a bespoke sculpture celebrating shipbuilding in the city at the end of the Keel Line, to Galley's Gill and the Riverside Park on the land below (Author interview: Director of Community Engagement Organisation – SC1, January 2018). As well as green space, this area is close to the River Wear, which functions as a wildlife corridor. This site therefore has both potential positives and negatives in terms of its potential for green infrastructure, and the outcome will only become clear as the site progresses. The master plan developed for this site clearly sets out the individual plots for development, but has little to say about the nature of the spaces beyond the buildings themselves and so gives little direction in terms of developing green spaces, such as pocket parks or specification of drainage systems to be used within individual plots on the site. This is probably due to the associated costs of maintenance of green space and the lack of clarity of who the developers and occupants will be for the site as a whole. The fact that City Council funded developments are increasingly hard landscaped makes it difficult to impose this requirement on private developers.

The Fruit Market Area in Hull has had significant investment to enhance flood defences, which in turn has safeguarded flora along the River Humber. However, much of the area has been hard landscaped, developed as part of the public realm works undertaken prior to the 2017 City of Culture. Although the area, particularly Humber Street, has won a number of accolades including the Academy of Urbanism's Great Street's Award in 2017, this has done little to contribute to the extent of its green infrastructure (Author interview: Local Authority HAZ Project Manager - HP3, July 2018). The focus of this area's development has been to enhance the economic and social contribution to the city centre through its cultural offering and housing.

The construction of the Northern Spire in Sunderland has opened up land for development on the south bank of the River Wear. However, the creation of the Strategic Transport Corridor leading from the bridge will negatively impact on habitat connectivity across the site, destroying areas of woodland and having an impact on commuting corridors used by birds and bats (DWS, 2015). These are important components of the green infrastructure in the area, but the perceived economic imperatives are taking precedent in terms of linking the Nissan site to the Port. There is space to reinstate shrubs and some trees along the route and these were outlined in the original planning application; however, given that developments along this corridor are expected to be created with private sector investment, it is unclear how much green infrastructure will be integrated (Author interview: Local Authority Executive Director for Economy and Place - SP4, October 2018). However, the master plan for construction of the new neighbourhood on the former Groves site has green infrastructure integrated within it, including the provision of two football pitches and a number of open and accessible amenity spaces aimed at encouraging community use. These are facilities not currently available in this or the surrounding neighbourhoods. By the end of 2019, however, no progress had taken place towards the development of this new neighbourhood, despite a suitable developer being identified.

In summary, few of the reuse developments discussed above will contribute to enhancing green space / green infrastructure within either city. Although the health and wellbeing benefits of green space are recognised by both City Councils (HCC, 2017; SCC, 2017), the ongoing maintenance costs of green space significantly constrain their implementation (Author interview: Local Authority Planning Manager - HP2, June 2018).

8.5 Increased housing and offices

Increasing the employment opportunities available to local residents is a priority for economic development within both Hull and Sunderland. The quality of the jobs created influences the revenue the cities can accrue, and thus the spending power available within the local economy. Both Hull and Sunderland consider their city centres to be underexploited in terms of generating income, as much of the

employment creation has occurred elsewhere in the city and so increasing the number of jobs in the centre is a priority in both areas.

One of the original purposes for developing the Vaux site was to 'make the market' for high quality office space within the city centre, which is currently unavailable elsewhere in the city (Author interview: Chief Executive of SPV Development Organisation – SB5, December 2017). It is expected that this will attract higher paid workers into the city centre and hopefully benefit restaurants, bars and shops because of increased spending power, and encouraging a wider range of amenities to those who live or work in the area. In addition, the site is set to develop a public sector hub that will include a new city hall, which not only relocate staff currently in the Civic Centre but will also house other public sector employees as well (Author interview: BID Operations Manager - SB6, January 2018). In turn, the relocation of staff from the Civic Centre will free up a large site for housing near the Park Lane interchange and the College, and hopefully encourage residents that are located there to use city centre facilities – thus increasing demand for goods and services in the area. It is expected that a number of the office units on the Vaux site will have retail and leisure space on the lower floors to attract customers (Author interview: Director of Community Engagement Organisation – SC1, January 2018). Although much of the public sector employment is likely to be displaced from elsewhere in the city, the other office-based jobs are hoped to be additional to the area (Author interview: Local Authority Executive Director for Economy and Place - SP4, October 2018). The idea is that having more employed people concentrated within the city centre will increase its vitality. However, it must be recognised that the displacement of workers from large buildings elsewhere in the city, could lead to the emergence of new redundant spaces in the longer term, unless reuse of these properties occurs quickly.

The Vaux site is located close to a metro station, train station and on a number of bus routes (Author interview: Chief Executive of SPV Development Organisation – SB5, December 2017). It is also intended that there will be cycle paths linking this site to the coast and other parts of the city centre, including the Heritage Action Zone, while footpaths will encourage people to walk onto the site (Author interview: Director of Community Engagement Organisation – SC1, January 2018). On-site

parking will be limited and combined with the other public and active transport options, will mean that car journeys will be lower than they are at Doxford International, which will also reduce CO₂ emissions and therefore improve air quality.

The Music, Arts and Cultural Quarter, located nearby to the Vaux site is being developed to enhance the area's cultural offering, through the development of a number of performance venues, creating a small number of jobs in the refurbished pubs, remodelled fire station and the new auditorium. Station H will be developed to attract creative and cultural businesses into the area, generating new employment opportunities. In addition, Gill Bridge House has recently been taken over by Hays Travel, who have relocated their employees there from elsewhere in the city. The development of this site has stimulated the opening of a number of cafes in the adjacent areas, and it is developing into something of a food hub within the city centre (Author interview: Director of Community Engagement Organisation – SC1, January 2018).

Together the MACQ and Vaux site linked by Keel Square, will form the basis of the new city centre. Although Keel Square was created from the residual space left from the remodelling of St Mary's Boulevard to improve the accessibility of the Vaux site, it has a number of issues with respect to contributing to spatial equity – although its utilisation is preferable to leaving the land idle. The public realm work focused on creating the square, is of a very high standard consisting of sandstone and granite and includes water fountains. However, it is predominantly hard landscaping, as this was seen as the most cost-effective approach in times of austerity, requiring significantly less maintenance than soft landscaping. Initially, it was envisaged that this would be the location for city centre events, although this has not come to fruition and the activities that do take place within the city centre are distributed across other areas. The area itself has been described as arid (Author interview: Local Priest – SC2, March 2018), as there is insufficient footfall within the area, and it is an open question whether there is anything to attract people there. However, there is concern that the area's development will displace activity from elsewhere within the city centre, potentially leading to job losses, as the vibrancy and reputation of this area increases over time (Author interview: BID Operations Manager - SB6, September 2018). The net impact on spatial equity remains to be seen.

Hull's Fruit Market Area is a vibrant area with a significant number of small businesses locating there including bars, restaurants, a microbrewery and a number of galleries and workshop locations along Humber Street. The C4D building is located on land adjacent to this, which is a technology hub housing a number of small IT businesses. The area seeks to provide the leisure and entertainment offerings that skilled IT professionals are looking for, providing a range of venues not available elsewhere in the city and developing a somewhat bohemian feel to it (Author interview: Local Authority HAZ Project Manager - HP3, July 2018).

The Hull Bonus Arena employs 30 people on a full-time basis, with another 100-150 people working there on event days. The impact on employment from this development is more to do with the multiplier effect within the wider area. A number of new businesses have moved into the adjacent Princes Quay Shopping centre to provide food for the audiences attending performances at the Arena (Author interview: External Affairs Manager, Hull and Humber Chamber of Commerce - HB2, September 2018), while the increased footfall in the area has stimulated a number of food and beverage outlets to open in the surrounding areas (Author interview: City Centre Manager, Hull BID - HB3, September 2018).

On the former paper mill site in Sunderland, the proposed development will result in 227 dwellings with associated landscaping and infrastructure. However, before the development can take place, the site will require significant remediation due to its previous uses (Author interview: Housing Developer, Land Manager - SB2, January 2018). If the development takes place, it will be quite isolated as the other main residential areas are on the other side of a dual carriageway – although there is a public house adjacent to the site, there are no other amenities in the nearby area. This may act as a deterrent to house builders, as the potential price they could charge for housing could be quite low, especially given the costs associated with creating access infrastructure (Author interview: Housing Developer, Land Manager - SB2, January 2018). The attractiveness of this location to potential residents is also questionable, as it is close to three gas chambers which are locally listed – but may not provide the kind of view people want. On a more positive note, there are very good views out to sea from this site which could be viewed as an asset. However, this in turn may be diminished by some of the anti-social behaviour that occurs on

the beach below, such as the burning of tyres (Author interview: Area, Community Development Coordinator – SC4, December 2017).

The site is at the top of a tract of land that is designated for employment purposes, and closely linked with the development of the Port. Although it has an excellent view of the sea, this view is dampened by the industrial units occupying the intervening space, and combined with the lack of amenities in the area, it is unlikely to attract much footfall. Although, the fact that the houses will overlook the beach could help reduce some of the anti-social behaviour in the area. Furthermore, the remediation of the land would improve environmental quality and reduce the risk of contaminants being washed into the sea.

The Northern Spire Development Area proposes to create a new neighbourhood with the construction of houses, a school and some commercial units, along with community football pitches and green space on the former Groves site. The intention is to create a new community that enriches the area, but also links with the facilities in the surrounding areas including the Pallion retail park and shopping centre. It will benefit from its proximity to the Metro Station, which very few residential areas on the north side of the River Wear are able to easily access. This site will have an attractive vantage point overlooking the river, but depending on the nature of the other developments that will be built along this part of the Strategic Transport Corridor, this could impact on the resident's view. The creation of this new community will increase the amount of activity in the area and hopefully stimulate demand for goods and services.

Houses are beginning to be built on the Fruit Market site in Hull, and they are currently being bought from plan at a very rapid rate. The 101 new contemporary one, two- and three-bedroom homes arranged in mews style private courtyards, will form part of a newly created urban village. The £17m investment includes the reinstatement of two historic squares, previously lost: Horner's Square dates back to the mid-1800s, while Scott's Square was created in 1757 by local builder Joseph Scott who, constructed cottages in the narrow passage between Humber Street and Blanket Row. Restoring these historic squares will create pedestrian links between the new homes and the heart of the Fruit Market in Humber Street – and reconnect the city to an important and valued part of its heritage. The urban village will have

limited parking, as it hopes to encourage people to use public transport and active travel options rather than private cars (Author interview: Land Manager, City Council Development Partner - HB5, June 2018)

The Vaux site is scheduled to have houses built on it, but no formal planning application is likely to be made until sometime in 2020. The site has struggled to attract the interest of major housing developers because of issues of access, with most developers preferring green field sites (Author interview: Local Authority Planning and Regeneration Manager – SP1, February 2018). There is also a proposal for housing to be developed on the adjacent Farringdon Row site; a planning application for this was approved in 2007, but no construction activity has yet taken place. Directly across the River Wear is the Sheepfolds site, which again has proposals for housing and the two could be linked by a footbridge. These developments collectively could create 400-500 dwellings, but from a housing developers' point of view these would need to be de-risked with the installation of City Council funded infrastructure needed to kick start them. If developed, these sites would bring a significant number of potential residents into the city centre, which would in turn increase demand for retail and leisure services.

The Lord Line building's latest proposal has been made by an interior design company rather than a developer, and proposes to knock down the building and replace it with a four-storey structure housing 40 flats, with a bar or restaurant and undercroft parking for residents. The proposers have argued that the current building is now so dilapidated that it constitutes a danger to the public, and therefore cannot be redeveloped. The company behind these plans claims that the new building will provide a unique place for people to live in Hull (Hull Daily Mail 4/6/19). This kind of development is supported by the Hull and Humberside Conservation Trust, so long as the listed pumphouse is preserved and the memorial site is respected (Author interview: Environment Forum Coordinator – HP4, June 2018). However, the proposal does not include anything about access roads, etc., and purely considers the buildings – which again indicates that these proposals are unlikely to be taken forward.

Although new housing will bring people into these areas, they will only contribute to the spatial equity of the area if residents are able to interact with commercial and

community activities. Therefore, ensuring that there are sufficient amenities close by is essential. Good public transport and the infrastructure to support active travel activities such as walking and cycling, should also be taken into consideration if these new residential areas are not to negatively impact on air quality. All but the former paper mill site in Sunderland fulfils these criteria to a greater or lesser extent, while the sites in Hull are better situated in terms of new residents being able to access amenities and facilities on offer in the neighbourhood.

8.6 Increasing footfall and/or dwelling time

All of the case study sites will assist with increasing the footfall into their respective neighbourhoods, provided they are implemented effectively. With increased numbers of people entering the neighbourhoods, the vitality of the area can also increase, and the longer visitors can be encouraged to linger then the more likely they are to make use of the facilities on offer. This in turn may lead to more money being spent in the area.

The Hull Bonus Arena will attract people into that area of the city, and the surroundings have been visually enhanced through providing new hard landscaping and installing street furniture, to encourage people to spend more time there. A similar approach is being taken around the MACQ, including the redevelopment of the Town Park area near the Sunderland Minster. This will hopefully benefit the bars, restaurants and cafes in the area, as well as those in the MACQ itself. The fire station is certainly attracting people into the area but since it opened, the number of people frequenting the two adjacent pubs has decreased. It is not known if there has been a net gain in footfall, but there has at least been an increase in dwell time (Author interview: BID Operations Manager - SB6, January 2018).

To date, the Vaux and Lord Line sites are not really contributing to footfall or dwell time, but both have the potential to do so in the longer term. The Rainbow Garden does attract people and dwell time has increased due to the activities that take place there. The former paper mill site in Sunderland could increase footfall in the area, but without the necessary retail and leisure amenities then residents will simply seek these elsewhere. The primary focus of these developments of course is to attract

more people in, which will in turn increase footfall; however, developments in and adjacent to these sites will have a significant impact on dwell time.

8.7 Air quality improvements

Air quality can impact on the health and wellbeing of residents and may also have a negative affect on buildings in the neighbourhood, for instance, from passing vehicle emissions. The developments taking place or proposed for the case study sites in Hull and Sunderland will do little to improve air quality. In fact, given that the intention is to increase activity on these sites, they may lead to decreases in air quality. The exception could be the Hull Rainbow Community Garden with its creation of additional green space and the associated stewardship of green spaces around the neighbourhood, allotments and orchard. The Fruit Market, Hull Venue and Vaux site, should they attract an increase in visitors, could lead to increased traffic flows and congestion leading to higher levels of emissions. However, if the Vaux site displaces some activity from Doxford International, which is a car-dependent development, then overall there could be a net benefit to air quality in the city (Author interview: Local Authority Executive Director for Economy and Place - SP4, October 2018).

Increased traffic flows into the city via the Sunderland Strategic Transport Corridor along the Northern Spire Development Area, could lead to a deterioration in the area's air quality. However, the River Wear could absorb some of its emissions, due to its proximity. This route will relieve the pressure on parts of the A19 and the A183 and A1231 into Sunderland, so could again lead to a net improvement in air quality.

Improvements to the A63 in Hull, which will impact on the Hull Bonus Arena and Fruit Market Areas, could lead to enhancements in air quality, as the city aims to reduce the amount of traffic congestion on the road leading to the Port.

Because the case study sites are predominantly populated with hard landscaping, unfortunately they won't bring many of the benefits associated with green space, such as improving air quality through the absorption of emissions.

8.8 Conclusions

It is clear that the case study sites make only a partial contribution to addressing spatial equity deficits ingrained in the cities. However, it must be mentioned that this was not necessarily the priority aim of these reuses. Part of the reason for this could be the fragmented and piecemeal approach to the development of these projects, due in some respects to profile of the owners of the site and their aims. For instance, those simply looking for an economic return with limited or no links to the wider priorities within the city. Where there is clear engagement with the articulated priorities or aims of the cities, then projects are, in general, progressing and location is a significant factor in this. But the lack of coordination across projects means that some developments are held up, whilst other interventions in an area are underway.

The figure below illustrates how the case study sites potentially relate to addressing spatial equity deficits and to sustainable development more broadly. It is clear that the emphasis is very much on improving the amount of human activity within their respective cities

Figure 8-2 Framework for considering contribution to addressing disparities in spatial equity

Enhancements to:	Human activity and Wellbeing	Links to the environment
Amenities and facilities	Hull Fruit Market MACQ Hull Bonus Arena Lord Line site?	
Green space/ infrastructure	Hull Rainbow Community Garden Northern Spire	Hull Rainbow Garden Vaux Site
Housing	Hull Fruit Market Northern Spire Vaux site Lord Line site Former Paper Mill	
Offices	Vaux Site MACQ Hull Fruit Market	
Accessibility	Northern Spire	

The strong emphasis on economic outcomes has meant that the social and environmental objectives have been curtailed, due to the development approach being adopted in Hull and Sunderland. In particular, environmental concerns are a lower priority in both cities, which is highlighted by the limited focus given to green infrastructure; but also, because only two of the developments have a clear link with the environment. Social benefits are expected to occur through the trickle-down effects of economic focused outcomes.

Displacement of activities from one part of the city to another, without a remedial option for the areas that are being left behind and the general lack of interest from private sector investors means, that intervening in one area may not always bring a net gain to the city. Because of the constraints on public sector funding, it is not possible for local authorities to address this market failure. Increasingly, the city councils in Hull and Sunderland are providing the enabling infrastructure for projects, while expecting the private sector to fund the developments. However, as illustrated above, particularly in Sunderland, this is not always proving to be successful. Although not all investors are solely focused on an economic return, this stance remains rare, and the embeddedness of the individuals concerned within the wider development of the city is an important consideration.

Chapter 9. Conclusions

9.1 Introduction

The aim of this thesis was to examine whether the reuse of redundant spaces in post-industrial weak market cities, could contribute to addressing negative aspects associated with spatial equity. The research has been situated within post-industrial weak market cities, which tend to experience a high level of economic distress (Furdell and Wolman, 2006) due to their traditional focus on manufacturing industries, which have suffered severe loss of businesses and related jobs (Schwartz, 2013). The loss or decline of this type of employment can leave landscape scars, in the form of large tracts of brownfield land (Schlappa and Neill, 2013; Storm, 2016). Furthermore, these cities may be characterised by slow economic growth or even retraction in many cases (Furdell and Wolman, 2006), due to the difficulties in attracting private investment to help assist with urban resurgence. Reduced economic activity and constraints on investment can then result in the physical decline or decay of the urban environment (Plöger, 2013).

The objectives of this empirical research were to formulate a framework to define and conceptualise different types of redundant space, understanding the historical and geographical processes that have led to their current state. Secondly, to explain how different types of interventions in the case study sites have evolved over time, and the implications for their surrounding areas in terms of addressing spatial equity deficits. Thirdly, to analyse the impact of key mechanisms and processes that implicitly and explicitly impact in a range of regeneration strategies on the outcomes from reuse; and finally, to explain the implications of the ways in which these strategies are implemented and shape spatial equity within the case study cities.

This chapter draws out the key themes from the research, using a framework to address the research questions outlined in Chapter 2 Section 7. Within this framework, I highlight how this research has contributed to address the gaps identified in the literature. I then articulate the conceptual and methodological

contributions that this research has made. Finally, I offer reflections on the study and highlight areas for further research.

9.2 Summary of findings

The review undertaken in Chapter 2 identified a number of gaps in the literature that this research seeks to address. Analysis of third tier post-industrial cities in the UK is limited, with the notable exceptions of work by Martin *et al.* (2016) and Pike *et al.* (2016a) – but even these are focused on economic change and policy responses. The selection of Hull and Sunderland as my case study cities adds to this literature, but also moves it a step forward by seeking to understand the land use challenges they face with respect to redundant spaces. It also illustrates how the ‘weak market’ nature of some of these cities, can lead to a lack of utilisation of such spaces. This is essentially the main focus of this research.

There is a significant amount of literature on the reuse of vacant and derelict land and buildings as a contributor to economic growth, but only limited consideration is given to spatial equity as a contribution to the social dimension of sustainable development (Cuthill, 2010; Vallance, Perkins and Dixon, 2011; Murphy, 2012). My study seeks to contribute to addressing this gap.

The research questions outlined in Chapter 3 section 3 have been used as a framework to address the research gaps, as part of summarising the main findings. These are further elaborated upon in section 9.3, when considering the conceptual and theoretical contributions of this study.

How can ‘redundant’ spaces be conceptualised and their relationship with spatial equity be considered?

Redundant space is not clearly defined within the literature, as they tend to be rather ambiguous spaces within a city’s urban structure, falling between green and grey infrastructure. Although there are studies of vacant land and property (Accordino and Johnson, 2000; Bowman and Pagano, 2004; Foo *et al.*, 2013; Anderson and Minor, 2017; Kim, Miller and Nowak, 2018), these do not focus on the temporal dimensions that render a space redundant (Adams, Disberry and Hutchison, 2017). This temporal dimension is critical, as the longer a space remains unused or underused

the greater impact it can have on surrounding neighbourhoods, having negative implications for economic vitality, health and wellbeing and or environmental conditions (Garvin *et al.*, 2013).

The definition of derelict spaces offered by (Turok, 2015), that they are spaces that have 'outlived their usefulness to the economy and are by-passed by society', does not adequately highlight their variegated nature. However, the negative impact that they can have on adjacent sites and the general aesthetics of the city, can make them less attractive to investors, new employers or new residents. Therefore, it is likely that Local Authorities will need to take the leading role in addressing the spatial disparities that exist in such areas, by de-risking investments and providing enabling infrastructure. Because spatial equity or the reduction of spatial inequalities is a primary aim of regeneration policies (Stohr and Todtling, 1979), then attempts to reuse redundant spaces must mean that there is a relationship between these.

Some of the redundant sites may have had several attempts to reuse them and therefore this questions the assertion that they are 'by-passed by society' (Turok, 2015). Instead, they may be abandoned spaces that are hiding in plain sight (Vis *et al.*, 2014) or maybe 'residual landscapes' (Campbell, 2008). However, because these sites have been in existence for a long period of time, they may have become accepted as part of the everyday landscapes of the city (Coles, Millman and Flannigan, 2013).

Therefore, redundant sites are land and/or property that have remained unused or underused for more than a business cycle (4.5 years). Given that this is the time frame within which it would be expected that a site would be reused, then taking nine years (Adams, Disberry and Hutchison, 2017) as a yardstick for the duration that renders it redundant would seem reasonable. Unless these sites are an eyesore or have health and wellbeing concerns then for those who live or work near such spaces, then they can become landscapes of contempt (Lee, 2010)..

The existence of redundant spaces can limit the attractiveness of an area as a place to live and work and may constrain the decisions of employers to locate in such areas. Because of the tendency for redundant spaces to be located in areas of high

deprivation then addressing the limited employment and housing opportunities could help to reduce the problem and improve spatial equity.

What is the nature and extent of redundant spaces in post-industrial weak market cities?

Although it is commonly thought that brownfield sites tend to be concentrated in city centre locations (Schlappa and Neill, 2013), this does not appear to be the case for redundant spaces in Hull and Sunderland. Instead, there appears to be a relationship between the concentration of redundant spaces and deprivation within these cities. The structural and social changes affecting each city, may mean that the demand for certain types of land and property diminishes. Redundant spaces are not homogenous and can be categorised in different ways. Drawing on the work of (Lee and Newman, 2019), it is possible to differentiate these spaces into industrial, institutional, recreational, remnant, and reserved. However, even within these broad categories, there are a wide variety of spaces. Within the industrial category, the sites tend to be large and range from spaces which include former docks and a brewery to smaller sites with abandoned factory buildings. Former institutional sites tend to have large buildings located within them, because of the shift towards aligning assets with the strategic and operational needs of public sector organisations as a way of providing cost savings. This, particularly in times of reduced public sector funding due to austerity measures following the 2007/8 financial crisis. Such buildings include the former central Police Stations in both Hull and Sunderland, alongside the old ambulance station in Myton Street area of Hull and the old Fire Station in Sunderland.

Within Hull and Sunderland only two examples of recreational spaces were identified through the Townscape Analysis which were the Hull Rainbow Community Garden and the derelict buildings in the Sunderland Heritage Action Zone on High Street East. These are very different from one another as the Rainbow Garden was created from residual land once the garden fences had been moved to reduce the size of the gardens in the area. The redevelopment of the properties on High Street East have been developed into community facilities after the buildings had been left to rot and the owners were unable to gain the planning permission to demolish the buildings because of their historical significance.

Although these spaces have different origins and are being utilised in contrasting ways, they both provide recreational facilities for their local communities. The Rainbow Community Garden offers a range of horticultural and craft activities, while the properties on High Street East are a café, along with a music and arts venue providing a community hub.

What are the causes of redundant spaces and what factors are constraining their reuse?

The causes of redundant spaces are multifaceted. Processes of deindustrialisation are a primary cause in post-industrial cities, and this is illustrated in both Hull and Sunderland. Globalisation and the resulting decision by firms to relocate to lower cost production locations, can also lead to visible landscape scars on the vacated areas (Storm, 2016). The global financial crisis in 2007/8 caused a number of sectors to reconsider their locational and operational needs. The resulting reduction in people's disposable income had a major impact on high street retailers. Alongside this, the move by some to focus on on-line selling left a significant void in city centres and neighbourhood shopping areas. The reduced footfall and dwell time in these areas, in turn had further impact on people's willingness to spend and caused other service providers in these areas to consider whether not it was worth continuing to trade.

There are multiple factors that constrain the reuse of redundant spaces. This can initially be through the land allocation system of the Local Plan giving sites a particular land use designation. Changing the designation of a parcel of land, can be a long and drawn-out process. Although landowners may wish to have the site developed, the time scale may be an impediment to developers, as illustrated by the Lord Line site in Hull and the former Paper Mill site in Sunderland.

The decisions taken by landowners can act as a major constraint to the reuse of redundant space. Although, Local Authorities can fund enabling infrastructure to reduce the costs for private developers and facilitate the execution of projects. However, Local Authority ownership can prevent reuse if the land is designated for either strategic employment or housing uses. These may be reliant on other developments progressing before their implementation can begin. For example, the

construction of St Mary's Way in Sunderland was required before work could begin on the Vaux site. This was also an issue for development on sites on Myton Street in Hull, as the Hull Plan had this area allocated for, what is now, The Bonus Arena.

Conflicts of interest between land and property owners can delay implementation of projects, as can disagreements with the planning authorities of the type of uses proposed for a site. The Lord Line site at St Andrew's Dock in Hull has different owners for the land and the buildings. Although various proposals have been put forward for the site, the lack of agreement between the owners mean that no progress has been made. The former paper mill site in Sunderland has suffered from major disagreements between the landowner and the planning department.

Originally the land was allocated for employment uses but the landowner wanted it redesignated for housing, as this would increase the value of the land. Until this happened, the landowner refused to do anything with the site. This idle site became a focus for anti-social behaviour, including numerous acts of arson. Local children used the site as a playground which was considered dangerous and led to complaints from local residents in the nearby neighbourhoods to the Local Authority.

Site accessibility may be another constraint that needs to be overcome before development can progress. In many cases, this can be due to the topography of the site having steep gradients or previous infrastructure remaining in-situ, both of which can give rise to obstacles to development. Road networks that surround a site can also make it problematic, especially if they sever a particular area from other facilities or limit pedestrian access. The Fruit Market in Hull suffers from accessibility issues particularly for pedestrians moving from the city centre to the Old Town. Although major reconfiguration of the road system in Sunderland has taken place to facilitate access to the Vaux site, it is still a difficult location to negotiate for both cars and people.

The motivation and location of site owners can be an issue. If landowners are aiming to maximise the value of their land or property then, as was the case with the former paper mill in Sunderland, they may pursue a change of land use designation.

Alternatively, they may aim to push forward development that is out of line with the Local Authority's development priorities, as was the case with the Synagogue in Sunderland. Where owners are located overseas, they may use facilities

management companies to look after their property or they stall them hoping for capital appreciation (Sa, 2017). The Princes Quay Shopping Centre in Hull is under the former situation, which has limited the speed at which adjacent sites were developed as all of these sites were waiting for the construction of the Bonas Arena and the range of facilities that would be needed to support it for the benefit of the wider area. Also, a major building in the MACQ in Sunderland had overseas owners and was vacated by the HMRC with a significant period on the lease to run. Because the HMRC continued to pay rent then the owners had no interest in doing anything with the building and this had an impact on adjacent buildings and the surrounding areas, the location of this building and the general lack of footfall contributed to the general area feeling empty and arid.

Land values in Hull and Sunderland are relatively low for both housing and employment land. This may act as a deterrent to developers who are looking to maximise return on their investments. The need to do remediation work on many redundant sites increases the development cost. With land values being low, this will affect the amount of money that can be made on the final project outcome, influencing the viability of such projects.

The areas that are prioritised for development through investment corridors, area development plans or master plans, and underpinned by the limited Local Authority resources available in the post 2010 era, are likely to be the main focus of investment by public and private sector actors. If redundant spaces are located outside of these, then activating their reuse will often prove more challenging. The Lord Line site at St Andrew's Dock in Hull and the former Paper Mill site in Sunderland are examples of this.

Two further examples are worthy of note because their situation does not fall within the categories outlined above. These are the National Picture Theatre on Beverly Road in Hull and the Synagogue in Sunderland. The National Picture Theatre was bombed in 1941 during an attempted bombing raid on the docks, which destroyed all but the frontage of the building. It was left abandoned for years and nature took over the inside of the building, with vegetation visible growing from the roof. Although the facade has been listed and there are plans to turn it into a memorial to remind people of the importance of cinema during the Second World War, nothing has

progressed. The Synagogue in Sunderland was the main place of worship for the once strong Jewish community. However, this community began to decline from the 1970s, as economic conditions in Sunderland deteriorated. According to the Foundation for Jewish Heritage (Heritage, 2022), because the building has been empty for such a long time it has deteriorated and has been occupied by squatters and subject to various acts of vandalism.

In what ways are the reuses of redundant spaces attempting to address spatial inequality?

Because the focus of both Local Authorities in Hull and Sunderland is to improve the economic vitality of their cities through the pursuit of growth orientated plans, their aim is not explicitly about addressing spatial inequity but rather facilitating the private sector to address the issues that these cities face. However, because they utilise regeneration policies, then in theory at least, they are committed to reducing spatial inequality and enhancing equity. In its simplest form, spatial inequality stems from a lack of accessible employment opportunities for residents, leading to high levels of unemployment and poverty or an environment that is detrimental to the health and wellbeing of those that live and work in an area. Therefore, reuses should focus on creating employment opportunities and additional housing. But these need to be accessible to those from the most deprived areas, which often means selling off public assets to the private sector, as a neoliberalism approach and using these resources to improve the viability of projects in more deprived areas.

The redevelopment of the old fire station in Sunderland has added additional leisure and recreational facilities within the emergent cultural quarter of Sunderland. By conserving and renewing the original fabric and structure, its reuse is considered to be more sustainable (Aigwi, Egbelakin and Ingham, 2018). However, it is the refurbishment of the inside that is adding to the area's amenities and facilities with the creation of a bar and restaurant on the ground floor, which offers something different from other establishments in the area. The upper floors are given over to a theatre company and a dance studio, which runs workshops as well as putting on performances. On the adjacent redundant space, a new auditorium is to be built, which will offer concerts and performances not offered by the nearby Empire Theatre. When the auditorium is not being used for these purposes, it will offer

community groups the opportunity to use the facilities, thus engaging a wider range of people than the core cultural activities would suggest. This auditorium is intended to replace some of the activities lost to the area when the Empire Theatre was restructured to host West End shows.

The development of this facility encouraged a private sector investor to consider adapting the former Gill Bridge Police Station into craft workshops. This could act to revitalise this area, with increased footfall and provide different employment opportunities to those proposed for the Vaux site on the other side of the road. This illustrates that once development begins in a particular location, it can stimulate further investments. This is further evidenced by several coffee shops and sandwich bars opening in the area to cater to people working in and using this cluster of new developments. However, there are concerns that this area may be displacing activities from elsewhere in the city centre.

The Fruit Market Area in Hull has taken a similar approach, particularly along Humber Street. Independent bars, cafes and galleries have opened up in the refurbished former warehouses and provide an offer that is not available elsewhere in the city. It is not only used by locals but has also been attracting people into Hull from the wider East Riding area. Although there may be some displacement of activities from elsewhere in the city, the overall impact of more people using facilities in Hull may compensate for this.

Beyond Humber Street, new houses are being built ranging from 2 bedrooms to large townhouses. Again, this is providing housing provision not already available in the city centre, and with access for active transport options along the north bank of the River Humber to the new Renewable Energy jobs on Green Port, it will contribute to a more sustainable area. Elsewhere on The Fruit Market site is the C4D building, which offers IT businesses office space. Again, this type of facility is not available elsewhere in the city. The existence of the housing, offices and entertainment spaces are bringing a vitality to the area that previously did not exist.

Now that the former Paper Mill site in Sunderland has a land use designation for housing, once complete they will bring new residents into the area. However, the location of these could be considered problematic from a spatial equity perspective.

This is because a major dual carriage way separates this area from the neighbourhoods on the other side of the road, and there are no amenities in the area, except for a public house. Most of the rest of the area is designated for employment use, but currently only abandoned former warehouses and land that has been cleared of their former industrial uses are present. From here, there is access down to the nearby beach, but currently the area suffers from anti-social behaviour. Whether the location of houses on this site will reduce the occurrence of such behaviour, remains to be seen.

The opening up of the former Groves site on the south side of the Northern Spire, has created an opportunity for a new neighbourhood to be built. The neighbourhood will comprise a mix of apartments and family homes and, unlike the former Paper Mill site, this new community will have its own amenities – including some retail units, a school and playing fields. It is in close proximity to the Pallion Retail Park and Shopping area and may stimulate the development of some of the abandoned buildings in these adjacent areas.

Although initially the Vaux site was intended to be an office park providing a range of offices not available elsewhere in the city, there were always plans for some housing. Although the number of houses planned for the site has increased, the Farringdon Row area and Sheepfolds are also proposing additional housing. This will bring greater numbers of people to live near the city centre, hopefully increasing footfall. Because much of this housing will be close to retail and leisure facilities and transit links, which enable the option of cycling and walking, this could potentially increase the air quality around this area. Active travel options could be facilitated by the hard landscaping in the reused sites. However, much of this is in place because the cost of maintenance of green space is at present considered a major deterrent to its utilisation in the reuse of redundant sites.

The examples above illustrate that the reuse of redundant spaces can and do contribute to spatial equity, by increasing the amount of employment and housing in an area. However, access to other amenities and facilities is an essential requirement if the vitality of the area is to be improved due to increased human activity. Location is an important consideration, as the ability to get to and use these

new facilities is a fundamental requirement, but in reconfiguring the surrounding infrastructure should not lead to other sites becoming isolated and inaccessible.

9.3 Conceptual/theoretical contributions

My research contributes to understanding the constraints for development in weak market cities, and differs from other studies (Furdell and Wolman, 2006; Power, 2010; Schwartz, 2013) as the focus is on the issues in third tier cities rather than the larger second tier cities, such as Liverpool and Manchester. Therefore, it provides a means by which a wider range of cities may be considered. Key issues which were highlighted in my case study cities were the relatively low land values across the area, and particularly in areas with higher levels of deprivation. Additionally, the perceived low financial return for investors deters them from implementing projects in these areas, and also deters development. A number of locational issues relating to access and site condition, rendering them more difficult to develop and thus increasing the costs of doing so, also prove a deterrent. This adds a dimension to the existing research on weak market cities which tend to focus on the performance of the city as a whole, rather than particular sites within a city.

Although there is some mention of redundant spaces in the literature (Turok, 2015; Adams, Disberry and Hutchison, 2017), other than providing the basis of a definition there would appear to be no empirical analysis of these spaces, which this study aims to begin to provide. It further develops the concept of redundant spaces, highlighting their variegated nature and setting them within a framework that considers their pathways and the drivers of change resulting in their redundancy. It therefore conceptualises redundant space as unused or underused land or property, that has remained so for 9 years or more, despite attempts to reuse them. Rather than being by-passed by society, in many cases these spaces are 'hiding in plain sight' and are therefore ignored to a certain extent. Part of the explanation for this, is because of the complexity of doing anything with these spaces due to their ownership – especially if there is fragmented or multiple ownership; location and land use designation which determines its land value; remediation costs associated with getting a site to a viable development state; delays due to the planning system; and the priority level of a particular site when compared with adjacent sites, in terms of them gaining enabling infrastructure or simplified planning regulations. Approaching

the reuse of redundant sites through their constraints as a lens, can change the way we think about them.

Because of the constraints that exist to the reuse of redundant spaces, particularly the additional costs and lower returns available to investors, this study has identified the greater role that needs to be played by the Local Authorities in enabling and facilitating development. Essentially, the interventions they need to make are intended to de-risk interventions for investors or developers and also make up viability shortfalls in pursuit of their wider, non-financial goals. These have included retaining site ownership and releasing parcels of land to developers when they are ready to begin their projects, meaning that the liability for the site and any associated costs remain with the Local Authority. Where Local Authorities own particular parcels of land, they sometimes gift these to developers as part of an asset transfer, providing them with project value before they even begin. To make many of these projects viable or of a higher specification, the Local Authorities have had to fund significant enabling infrastructure to remove physical barriers to the development, which may include the provision of transport routes and access roads, as well as remediating sites to remove contaminants and other barriers. Engaging in joint ventures with developers can also mean the Local Authority occupying or funding the occupancy of part of a building or indeed part funding a specific development. Although Local Authorities must comply with the requirements of the National Planning Policy Framework (NPPF), the willingness of Local Authority officers and politicians to flex the rules can influence the Local Plan's effectiveness in enabling development. Alongside this, the Local Plan having an overview of other developments on adjacent sites can provide confidence to those wishing to implement a project on a particular site. These interventions in land use do not appear to feature in the existing literature as enablers of city development. Therefore, conceptualising the nature of the interventions, by various multiscalar actors, is necessary to enable the reuse of redundant spaces, and would provide the basis for a useful heuristic to recognise the role that each actor plays.

9.4 Methodological contributions

A key methodological contribution has been the use of Local Authority administrative data on land availability to identify potential redundant space, recognising the

temporal and spatial dimension of these spaces as being essential for characterising the space as redundant. Due to data availability limitations, I was not able to provide a time series analysis which would have enhanced the current state analysis of redundant space used for this research. The demise of the National Land Use Database (NLUD) is a real loss to this type of analysis, but because it ceased to have comprehensive coverage from 2010 and was discontinued from 2012, I did not consider it to be an appropriate source for a study that began in 2016. Although the Ordnance Survey have comprehensive data on Green Space across the UK, no similar data exists for brownfield sites. The former is linked with considerations of health and wellbeing, whilst my research has shown unused brownfield sites can have negative impacts on economic, social, and environmental aspects of wellbeing. Although Local Authorities are compiling Brownfield Registers of land within their boundaries, the criteria for inclusion is that they must be suitable for housing developments and so many redundant sites will not be included because of the remedial work necessary to make it 'shovel ready'. These registers will be updated in real time, overwriting previous entries, thus providing a current portfolio of land. However, it does mean that time series data is unlikely to be available from these sources either.

Building on the idea of site analysis (LaGro, 2008), this research has developed an approach which considers the evolution of the case study sites in terms of Site Reviews. Each of the eight case study sites have been subjected to this process. Utilising a mixed methods approach, my research draws on documentary analysis of strategies and plans that contextualise the sites, alongside consultant's reports outlining how these sites will be developed. These are supplemented with historical and contemporary photography to provide a set of visual representations of the site and material from stakeholder interviews, which reflect on the history and future of these spaces. These have provided a rich evidence base for the study and a model for adaptation and use in other studies.

The use of a basic Townscape analysis technique (Landscape Institute, 2018) to identify the different types of redundant space within each city and link this with the evolutionary causes leading to their current state, as well as the impact it has on the surrounding neighbourhood, adds another dimension to existing literature. This

constitutes a development beyond vacant land typologies (Kim, Miller and Nowak, 2018), as it specifically focuses on redundant spaces and considers their cause and effect, rather than merely providing a description of the spaces. This allows for consideration of the variety of these spaces, rather than viewing them as a homogenous group, and enables different approaches to addressing their reuse to be considered and implemented. Using this approach, enables some environment scanning of the areas adjacent to the main redundant site, which can be used to identify additional redundant sites within an area. This proved to be useful in the case of the MACQ in Sunderland, where the existence of redundant spaces were not immediately obvious.

9.5 Reflections on the study

As a comparative study of only eight sites across two cities in England, the empirical scope of this research is obviously limited. Although, this research has highlighted the variety of redundant spaces and their causes and consequences, as well as the impacts of a nationally determined land use planning framework. Therefore, consideration of the land use governance frameworks and their potential to address the issue of redundant space is constrained. Because of the time constraints on this study, it was not possible to develop a comprehensive understanding of the processes used to determine how particular areas and sites were prioritised for development. A significant amount of time was used reviewing Local Authority planning and strategy documents and discussing specific sites with officials. However, to obtain the information necessary to understand the process would have involved discussions with a wider range of Local Authority officers and politicians, which would have reduced the time available to discuss issues with other stakeholders.

Stakeholder interviews were a significant element of the empirical research. The potential interviewees were identified by categorising participants into one of the following groups: Business, Policy and Community/Civic. Because I spent many years working in Economic Development, it was relatively easy to identify the particular individuals that I would engage in this research, either through recommendations from other interviewees or people that were already known to me from previous engagements. This enabled me to partake in close dialogue (Clark,

1998), which could be considered by some to run counter to the aim of objectivity (Madill, Jordan and Shirley, 2000). However, detailed case study approaches require a level of engagement with the individuals concerned. Identifying the individuals was relatively straight forward but gaining access to them, because of their seniority in the organisations and the number of gatekeepers such as secretaries, proved to be quite difficult. Even when appointments could be made, they were often set for some time in the future and subject to change, which they did frequently, and this prolonged the timescale of the interview process. Although the study may have benefited from more engagement with developers or investors, these were not often in the public domain and the Local Authority officers kept this information confidential due to the uncertainty around potential projects.

A major gap in this research is an understanding of the processes used to identify sites as a priority for development. Obviously, the viability of development is a key consideration from an investor's perspective, but the means by which local authorities bring forward sites for development within their Local Plans was not explored. This would have required more time than I had available and an in depth, almost ethnographic, approach; and would have changed the nature of the research completely, requiring interactions with a different set of stakeholders.

The case studies were selected on the basis of sites identified in Local Authority planning and strategy documents. However, as explained in Chapter 7, these do not include all sites that could be considered redundant, as they tend to be limited to sites that have been brought forward for an allocation within the Local Plan. Sites that are in private ownership or under the control of charitable trusts are the most likely to remain unidentified through these processes. They also tend to have no publicly available development plans which renders them essentially invisible to the planning system – but they could still have negative impacts on their surrounding neighbourhoods. Also, the case study sites did not include all of the types of redundant spaces identified in this research. However, this would have rendered the scope of the study too large, especially given the comparative nature of the analysis. This does mean that there are significant gaps in this analysis which could be addressed in future research. Also, the national planning context heavily influences the priority given to redundant spaces, especially if they fall outside a priority

development area that have previously been agreed with central government. Therefore, understanding different governance contexts could possibly lead to a better understanding of the limitations of the effectiveness of local interventions.

Using the rationale of market failure as the means of justifying interventions in particular sites, could be seen as part of the problem constraining the reuse of redundant spaces. The economic market-based conceptualisation of value that underpins this concept affects the allocative mechanisms used by local planning authorities. However, if market-based approaches considered the creative nature of markets rather than their allocative role, then this could enhance economic development within a weak market city (Arndt, 1988).

9.6 Future areas for research

Time and other resource constraints have limited the scope of this research, but the process of undertaking this study has stimulated an interest in developing some aspects of the work further.

Developing an understanding of the process for prioritising sites for reuse could make a significant contribution to the literature. Taking one or two sites as examples and examining the decision processes used and stakeholder influence on prioritisation, could provide some useful insights. It could enable a contribution to be made to better understanding the political and technical processes involved in the prioritisation of sites (TCPA, 2016).

A further area of research could be to consider different development approaches used within different European contexts, particularly in France and Germany (Cunningham-Sabot and Fol, 2009; Couch, Sykes and Börstinghaus, 2011; Bontje and Musterd, 2012), and the success or otherwise that they have in addressing redundant spaces. In doing this, it would be critical to ensure the cities selected have broadly similar characteristics, to enable an understanding of the strategic framing of the intervention and governance arrangements to be assessed.

A major gap in this current project is an understanding of who the reuse of redundant space is intended for and who actually uses it. This links to the idea of access and whether the barriers to use by specific sections of the community, are intentional or

not. Developing this area of research could provide greater insight into whether or not the reused spaces address spatial inequalities or exacerbate them. Although attempts to answer a similar type of question has been made for local and regional development (Pike, Rodríguez-Pose and Tomaney, 2007), it has not been considered at a very localised scale and about particular sites.

Appendix A. Example of Site Review

Site Reference and/or Name: Hull Fruit Market	
Site Location	<p>The Fruit Market Area of Hull is located south of the Old Town, with Castle Street (A63) to the North, Humber Dock Street and the Marina to the West, the River Hull to the East and Humber River to the South.</p>
<p>Source: https://www.fruitmarkethull.co.uk/discover</p>	
Site Area	<p>8.9 ha (approx.)</p>
Type of Land	<p>Brownfield</p>
Brief History	<p>The Fruit Market area has always been integral to Hull's old town, and its urban form and character are a legacy of the many environmental, cultural and socio-economic influences upon the old town throughout its history – from the construction of the town walls in the 15th century to the creation of the ring of inner docks in the 18th and 19th – and their closure in the 20th. While successive</p>

waves of development, most particularly in the second half of the 20th century, have eroded this relationship, the influence remains.

The Fruit Market had operated here since around 1905, bringing together fruit traders from across the city, although it was heavily bombed during the second world war and rebuilt, it remained the centre of Hull's wholesale fruit and vegetable trade until 2009. The photo below is of the Fruit Market in 1955



Source: <https://www.fruitmarkethull.co.uk/discover/>

Plans were commissioned by Hull Forward, shortly after its establishment in 2007, for the comprehensive redevelopment of the area, with building work due to start in 2008. Hull Forward were seeking enterprising businesses to take up the warehouses in the area, after they relocated the fruit and vegetable traders to a purpose-built site on the outskirts of the City. But in 2009, the plans for the area were scrapped, as they could not be funded in a realistic timescale and consultants were appointed to produce a 'Meanwhile Use Strategy' for the area, to accommodate the needs of the arts and cultural businesses operating there. However, with the demise of Yorkshire Forward in 2010, under the coalition government who funded Hull Forward it was wound up, and Hull City Council took over responsibility for the redevelopment of the area. The photograph below shows the street at that time.



Source: Hull City Council, Public Realm Strategy, 2014

A new set of plans were tendered for and produced by a consortium of consultants, and led to Wykeland Beal being selected as the preferred development partners by Hull City Council. These new plans still allow for a comprehensive redevelopment of the area, but in more of an incremental way as funding becomes available.

In 2014, the area was awarded a £800,000 grant from the Coastal Communities Fund for the redevelopment of the area to kick-start, including improved flood defences and the refurbishment of 10 warehouses into flexible space for galleries, offices and independent retail and hospitality units, which have since flourished. This funding was matched by £4m of capital funding from the City Council as part of the £8m investment plans for the area.

The photograph below shows the ongoing work on redevelopment in Humber Street, which is the main spine of the area.



Source: Hull Fruit Market: Volume 1 Development Brief, 2012

Work has continued on the refurbishment of the premises, but there was also major investment in the public realm in 2016 in preparation for the City of Culture 2017.

The photograph below shows the completed Humber Street refurbishment. The aim was to retain as much of the character and original architectural features as possible, including the street art. Because of the quality of redevelopment in this area, it has been given a Great Streets Award by the Academy of Urbanism in September 2017.



Source: The Hull Plan accessed from <http://cityplanhull.co.uk/index.php/fruit-market/> on 22/5/18

Another major development in the Fruit Market area is the C4DI building, which opened in December 2015 and was developed to house digital businesses, including those linked with the creative sector. The meeting space and conference space offers additional resources to the cultural businesses located in the wider Fruit Market area.

In addition, the dry dock in front of the building has been developed into a 350-seat amphitheatre, where open air performances are staged and has been branded as Stage@The Dock.



Source: The Hull Plan accessed from <http://cityplanhull.co.uk/index.php/c4di-the-dock-digital-hub-and-outdoor-performance-ampitheatre/> on 22/5/18

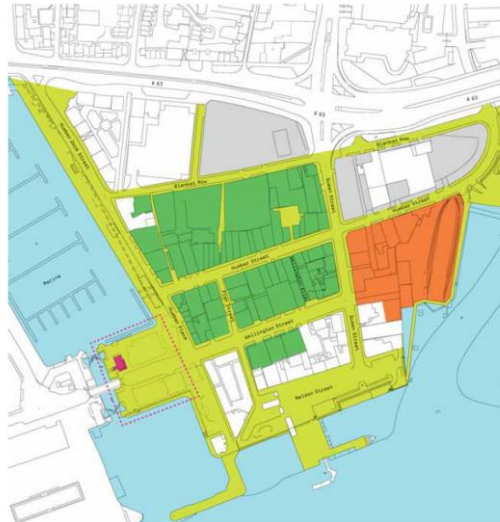
The image below shows the Dry Dock before the development of the area. It shows it to be a neglected and abandoned area.



Source: <http://www.stageatthedock.co.uk/gallery/history-of-the-dry-dock/> accessed 23/5/18

Current Status

The area is being branded as the city's cultural and creative quarter, and is considered to be Hull's 'sustainability fix' because of its attempt to address environmental, economic and social deficits within the area that will have an impact into the wider city.



Sources: Hull Fruit Market Volume 1 // Development Brief 2012

Although Humber Street and the Digital Dock and Amphitheatre are complete, there is significant development work still taking place within the area. The former car parks are being cleared to make ready the sites for houses. The photographs below show the clearing of the car parks.



Source: Author's photo taken 27/7/17



Source: Author's photo taken 27/7/17

Below is the Fruit Market manager's office, which is to be retained within the redevelopment of the area. The C4DI building can be seen in the distance.



Source: Author's photo taken 27/7/17

Demand for these houses is high, with the developer having to release the second phase early. However, people are currently buying off plan – but despite this most of the houses are now sold.



Source: <https://www.hulldailymail.co.uk/news/hull-east-yorkshire-news/fruit-market-developer-forced-put-1094185>.

Key Designations	<ul style="list-style-type: none"> • Housing • Craft workshops and art studios • Leisure including cafes, bars and galleries • Offices/Meeting and conference facilities
Adjacent Designations	<ul style="list-style-type: none"> • Marina • Hotels • Leisure facilities and offices
Physical Constraints	<p>The A63 is a major constraint in accessing the Fruit Market from the Old Town. In addition, Phase 2 of the development is being held back until the Castle Street phase of the A63 is finally decided upon.</p>
Environmental Constraints	<p>Potential Flood Risks</p>
Social Constraints	<p>None identified</p>
Future Plans	<p>Across the whole of the Fruit Market area, 429 new residences are expected to be built. The buildings in the area will continue to be redeveloped into additional workshop space and the car parking within the area will be enhanced. Additionally, more public realm works will be required as the residences are constructed.</p> <p>Part of the plans for the enhancements to the A63 will include a footbridge over the road, which will improve accessibility between the Old Town and the Fruit</p>

Market Area.



Source: Artist's impression of footbridge <http://cityplanhull.co.uk/index.php/a63-bridge/>
accessed 2/6/18

**Other
Sources**

Appendix B. Participants Briefing Note

Reuse of unused and underused spaces – Participant Brief

This research seeks to develop a better understanding and explanation of how the reuse of unused and underused buildings and land in UK cities, can contribute to their sustainable development.

Contact Information

Ian Jones (i.jones2@newcastle.ac.uk)

Centre for Urban and Regional Development Studies (CURDS), School of Geography, Politics and Sociology, Newcastle University, Geography Postgraduate Office, Daysh Building, Claremont Road, Newcastle upon Tyne. NE1 7RU. Mobile: 07725463861

Research Aims and Objectives

This research aims to understand why some areas of land and property are reused when they fall into disuse and others are not, whilst considering whether the perceived 'value' of these is a factor.

It also will develop a view on the potential options for reuse and how these can contribute to the sustainable development of the city, and what the main constraints on development are.

Research Methods

Data analysis and mapping techniques will be used in conjunction with a range of interviews with policy makers, property developers, owners, business, and community groups to understand why these spaces exist and what their potential reuses could be.

The Interview Process

- The location and time of the interview can be at the interviewee's convenience.
- Each interview will take around 30-45 minutes.
- The interviewer will cover some pre-prepared questions, but free-flowing discussion is encouraged.
- Where recording is possible, the interviewee will be asked for their consent.

Research Outputs

The findings will be used to write an academic Doctoral Thesis and the material may be used in academic papers and conference presentations. The academic thesis will be available from late 2019 and will be stored in a secure digital format and in the University Library. It is also hoped that the findings will help inform future developments within the case study cities and beyond.

Confidentiality and Use of Data

This research aims to use information provided by interviewees in the research outputs. Direct quotes may be taken from interviews, and general agreement will be sought at the time of the interview. It is important to note that both individual and corporate anonymity will be guaranteed throughout this process. Accordingly, interviewees will, if cited, be referred to in the following manner:

- Position within organisation (e.g. Chief Executive, Senior Manager, Coordinator)
- Nature of Organisation (Local Government, Property Developer, Business Organisation, Community Organisation)
- Anonymised Identifier (e.g. A, B, C, D, etc)
- Month and year of interview

For example: The Senior Managers of the Property Development Company A stated that
“ (June 2018)

All data will be backed up and stored securely.

Researcher Background

Over 25 years' experience of working in the public sector in both senior management and research positions including Senior Research Associate, CURDS, Newcastle University Director of Planning and Performance, LSC Northumberland, Director of Economic Development, LSC North East. Five years as a self-employed research consultant.

Research Oversight Information

This research is supervised by Professor Andy Pike; andy.pike@ncl.ac.uk (0191 2228011), Centre for Urban and Regional Development Studies, Newcastle University, Newcastle upon Tyne, NE1 7RU

Participant Interview Consent Form

Name:

Position:

Date of Interview:

1. I agree to the recording of the interview and for it use in the research output as detailed in the Participant's Briefing Note.

Signed:

2. I agree to direct quotations from this interview to be used in the research output.

Signed:-----

-

I would like to thank you for your participation in this study

Ian Jones

PhD Researcher

References

- Acaps (2011). Direct Observation and Key Informant Interview Techniques for primary data collection during rapid assessments. *Technical Brief*.
- Accordino, J. and Johnson, G. T. (2000) 'Addressing the vacant and abandoned property problem', *Journal of Urban Affairs*, 22(3), pp. 301-315.
- Achmani, Y., Vries, W. T. d., Serrano, J. and Bonnefond, M. (2020) 'Determining Indicators Related to Land Management Interventions to Measure Spatial Inequalities in an Urban (Re)Development Process', *Land*, 9(11).
- Adams, D. (1994) *Urban planning and the development process*. London: UCL Press.
- Adams, D., Disberry, A. and Hutchison, N. (2017) 'Still vacant after all these years – Evaluating the efficiency of property-led urban regeneration', *Local Economy: The Journal of the Local Economy Policy Unit*, 32(6), pp. 505-524.
- Adams, D., Disberry, A., Hutchison, N. and Munjoma, T. (2010) 'Land Policy and Urban Renaissance: The Impact of Ownership Constraints in Four British Cities', *Planning Theory & Practice*, 3(2), pp. 195-217.
- Adams, D., Disberry, A., Hutchison, N. and Munjoma, T. (2016) 'Ownership Constraints to Brownfield Redevelopment', *Environment and Planning A: Economy and Space*, 33(3), pp. 453-477.
- Adams, D. and Watkins, C. (2002) *Greenfields, brownfields and housing development*. Oxford: Blackwell Publishing Limited.
- Aigwi, I. E., Egbelakin, T. and Ingham, J. (2018) 'Efficacy of adaptive reuse for the redevelopment of underutilised historical buildings', *International Journal of Building Pathology and Adaptation*, 36(4), pp. 385-407.
- Albouy, D. and Ehrlich, G. 2014. The Distribution of Urban Land Values: Evidence from Market Transactions. Illinois, USA: Lincoln Institute of Land Policy.
- Alexander, E. (2009) 'Dilemmas in Evaluating Planning, or Back to Basics: What is Planning For?', *Planning Theory & Practice*, 10(2), pp. 233-244.
- Alker, S., Joy, V., Roberts, P. and Smith, N. (2000) 'The Definition of Brownfield', *Journal of Environmental Planning and Management*, 43(1), pp. 49-69.
- Allmendinger, P. and Haughton, G. (2010) 'Spatial Planning, Devolution, and New Planning Spaces', *Environment and Planning C: Government and Policy*, 28(5), pp. 803-818.
- Alonso, W. (1960) 'A theory of the urban land market', *Papers in Regional Science*, 6(1), pp. 149-157.
- Anderson, E. C. and Minor, E. S. (2017) 'Vacant lots: An underexplored resource for ecological and social benefits in cities', *Urban Forestry & Urban Greening*, 21, pp. 146-152.
- Arndt, H. W. (1988) "'Market failure" and underdevelopment', *World Development*, 16(2), pp. 219-229.
- Atkinson, R. (1995) 'Post-war Urban policy in Britain: Changing perceptions and problems', *Policy Studies*, 16(4), pp. 6-17.
- Atkinson, R. and Kintrea, K. (2016) 'Disentangling Area Effects: Evidence from Deprived and Non-deprived Neighbourhoods', *Urban Studies*, 38(12), pp. 2277-2298.
- Atkinson, R. and Moon, G. (1994) *Urban policy in Britain: The city, the state and the market*. Macmillan International Higher Education.

Audirac, I. 'Some Thoughts about Urban Shrinkage in a Sea of Growth'. *International Conference on The Future of Shrinking Cities: Problems, Patterns and Strategies of Urban Transformation in a Global Context*, University of California at Berkeley, February 8-9.

Bachtler, J. (2010) 'Place-based policy and regional development in Europe', *Horizons*, 10(44), pp. 54-58.

Bambra, C., Cairns, J. M., Kasim, A., Smith, J., Robertson, S., Copeland, A. and Johnson, K. (2015) 'This divided land: An examination of regional inequalities in exposure to brownfield land and the association with morbidity and mortality in England', *Health and Place*, 34, pp. 257-69.

Bambra, C., Robertson, S., Kasim, A., Smith, J., Cairns-Nagi, J. M., Copeland, A., Finlay, N. and Johnson, K. (2014) 'Healthy land? An examination of the area-level association between brownfield land and morbidity and mortality in England', *Environment and Planning A*, 46(2), pp. 433-454.

Barnekov, T. and Rich, D. (1989) 'Privatism and the Limits of Local Economic Development Policy', *Urban Affairs Quarterly*, 25(2), pp. 212-238.

Barnes, T., Peck, J., Sheppard, E. and Tickell, A. (2007) 'Methods matter: transformations in economic geography', *Politics and practice in economic geography*, pp. 1-24.

Basiago, A. D. (1999) 'Economic, social, and environmental sustainability in development theory and urban planning practice', *The Environmentalist*, 19, pp. 17.

Beauregard, R. A. 'Shrinking Cities in the United States in Historical Perspective: A Research Note', *The Future of Shrinking Cities - Problems, Patterns and Strategies of Urban Transformation in a Global Context*, Berkley, USA, 8.

Beauregard, R. A. (2009) 'Urban population loss in historical perspective: United States 1820 - 2000', *Environment and Planning A*, 41, pp. 16.

Beauregard, R. A. (2012) 'Growth And Depopulation In The United States', in Mallach, A. (ed.) *REBUILDING AMERICA'S LEGACY CITIES: New Directions for the Industrial Heartland*. Columbia, USA: The American Assembly, Columbia University, pp. 50.

Beck, U. (1992) *Risk society : towards a new modernity*. London; Newbury Park, CA: Sage Publications.

Bell, D. and Jayne, M. (2009) 'Small Cities? Towards a Research Agenda', *International Journal of Urban and Regional Research*, 33(3), pp. 683-699.

Bentley, G. and Pugalis, L. (2014) 'Shifting paradigms: People-centred models, active regional development, space-blind policies and place-based approaches', *Local Economy: The Journal of the Local Economy Policy Unit*, 29(4-5), pp. 283-294.

Berger, A. (2007) *Drosscape : wasting land in urban America*. New York: Princeton Architectural.

Berke, P. R. (2016) 'Does Sustainable Development Offer a New Direction for Planning? Challenges for the Twenty-First Century', *Journal of Planning Literature*, 17(1), pp. 21-36.

Bernt, M. (2016) 'The Limits of Shrinkage: Conceptual Pitfalls and Alternatives in the Discussion of Urban Population Loss', *International Journal of Urban and Regional Research*, 40(2), pp. 441-450.

Berry, C. R. and Glaeser, E. L. (2005) 'The divergence of human capital levels across cities', *Papers in regional science*, 84(3), pp. 407-444.

Beswick, C.-A. and Tsenkova, S. (2002) 'Overview of urban regeneration policies', *Urban Regeneration: Learning from the British Experience*. Calgary: University of Calgary, Faculty of Environmental Design, pp. 9-17.

- Bianchini, F. (2018) *Cultural Transformations: The impacts of Hull UK City of Culture 2017*, Kingston upon Hull: University of Hull.
- Biernacki, P. and Waldorf, D. (1981) 'Snowball sampling: Problems and techniques of chain referral sampling', *Sociological methods & research*, 10(2), pp. 141-163.
- Bishop, R. C. (1993) 'Economic Efficiency, Sustainability, and Biodiversity', *Ambio*, 22(2/3), pp. 69-73.
- Blackman, T. (2013) *Urban policy in practice*. Routledge.
- Blowers, A. (1997) 'Society and sustainability: the context of change for planning', in Blowers, M. and Evens, B. (eds.) *Town Planning into the 21st Century*. London: Routledge, pp. 153-179.
- Blowers, A. and Young, S. (2000) 'Britain: unsustainable cities', in Low, N., Gleeson, B., Blander, I. and Lidskog, R. (eds.) *Consuming Cities: The Urban Environment in the Global Economy after the Rio Declaration*. Oxford: Routledge, pp. 91-110.
- Bluestone, B., Bluestone, I. and Harrison, B. (1982) *Deindustrialization Amer.* New York: Basic Books.
- Bontje, M. and Musterd, S. (2012) 'Understanding Shrinkage in European Regions', *Built Environment*, 38(2), pp. 153-161.
- Bowen, G. A. (2009) 'Document Analysis as a Qualitative Research Method', *Qualitative Research Journal*, 9(2), pp. 27-40.
- Bowman, A. O. M. and Pagano, M. A. (2004) *Terra incognita : vacant land and urban strategies*. Washington, D.C. : [Bristol: Washington, D.C. : Georgetown University Press ; [Bristol : University Presses Marketing, distributor], 2004.
- Boyer, T. and Polasky, S. (2004) 'VALUING URBAN WETLANDS: A REVIEW OF NON-MARKET VALUATION STUDIES', *Wetlands*, 24(4), pp. 12.
- Brachman, L. and Wilson, R. C. (2017) *Revitalizing America's Smaller Legacy Cities: Strategies for Postindustrial Success from Gary to Lowell*, Cambridge, MA, USA: Lincoln Institute of Land Policy.
- Brewer, J. and Hunter, A. (1989) *Multimethod research: A synthesis of styles*. Sage Publications, Inc.
- Brindley, T., Rydin, Y. and Stoker, G. (2005) 'Remaking planning : the politics of urban change'.
- Brownill, S. (2017) 'Neighbourhood planning and the purposes and practices of localism', *Localism and Neighbourhood Planning: Power to the people*, pp. 19-38.
- Bryman, A. (2012) *Social research methods*. 4th ed.. edn. Oxford: Oxford : Oxford University Press.
- Bryson, J. R., Mulhall, R. A., Song, M. and Kenny, R. (2017) 'Urban assets and the financialisation fix: land tenure, renewal and path dependency in the city of Birmingham', *Cambridge Journal of Regions, Economy and Society*, 10(3), pp. 455-469.
- Buhangin, J. 'Spatial equity: a parameter for sustainable development in indigenous regions', *The Sustainable City VIII*, 1343-1350.
- Bullen, P. A. and Love, P. E. D. (2010) 'The rhetoric of adaptive reuse or reality of demolition: Views from the field', *Cities*, 27(4), pp. 215-224.
- Burrows, L. (2014) *Removing obstacles to brownfield redevelopment*, London: CPREForesight Paper No.2).
- Byrne, D. (1994) 'Planning for and against the divided city', in Burrows, R. and Loader, B. (eds.) *Towards a Post-Fordist welfare state..* London: Routledge.

- Byrne, D. (1999) 'Tyne and Wear UDC—turning the uses inside out: active deindustrialisation and its consequences', in Imrie, R. and Thomas, H. (eds.) *British Urban Policy—An Evaluation of the Urban Development Corporations*, pp. 128-143.
- Callaghan, G. (1988) *Young People and Social Change in Sunderland: de-industrialisation and cultural change*. PhD, Durham, Durham.
- Campbell, C. (2008) 'Residual Landscapes and the Everyday: An Interview With Edward Burtynsky', *Space and Culture*, 11(1), pp. 39-50.
- Campbell, J. (2018) 'The lost homes of Hull's council estates and streets - and how losing them changed everything', *Hull Daily Mail*. Available at: <https://www.hulldailymail.co.uk/news/hull-east-yorkshire-news/lost-homes-hulls-council-estates-1583120>.
- Carmon, N. (1999) 'Three generations of urban renewal policies: analysis and policy implications', *Geoforum*, 30(2), pp. 145-158.
- Centre_for_Cities (2019) *Cities Outlook*, London: Centre for Cities.
- Cheshire, P. 2009. Urban land markets and policy failures. *Land Use Futures Discussion Paper*. London: London School of Economics.
- Cheshire, P. and Sheppard, S. (1998) 'Estimating the demand for housing, land, and neighbourhood characteristics', *Oxford Bulletin of Economics and Statistics*, 60(3), pp. 357-382.
- Cheshire, P. C., Nathan, M. and Overman, H. G. (2016) *Urban economics and urban policy : challenging conventional policy wisdom*.
- Christians, C. G. (2005) 'Ethics and Politics in Qualitative Research', in Denzin, N.K. and Lincoln, Y.S. (eds.) *Sage Handbook of. Qualitative Research*. London: Sage, pp. 139-164.
- Christophers, B. (2018) *The new enclosure : the appropriation of public land in neoliberal Britain*. Verso.
- Clark, G. L. (1998) 'Stylized Facts and Close Dialogue: Methodology in Economic Geography', *Annals of the Association of American Geographers*, 88(1), pp. 73-87.
- Cocurate (2012) *Pennywell*. Newcastle: Co-curate (Accessed: 22/4/19 2019).
- Coffey, W. J. (2013) 'The Geographies of Producer Services', *Urban Geography*, 21(2), pp. 170-183.
- Coles, R., Millman, Z. and Flannigan, J. (2013) 'Urban landscapes - everyday environmental encounters, their meaning and importance for the individual', *Urban Ecosystems: Vol. 4*, pp. 819-839.
- Colomb, C. (2007) 'Unpacking new labour's 'Urban Renaissance' agenda: Towards a socially sustainable reurbanization of British cities?', *Planning Practice and Research*, 22(1), pp. 1-24.
- Connelly, S. (2007) 'Mapping Sustainable Development as a Contested Concept', *Local Environment*, 12(3), pp. 259-278.
- Cook, I. R. and Ward, K. (2013) 'Relational Comparisons: The Assembling of Cleveland's Waterfront Plan', *Urban Geography*, 33(6), pp. 774-795.
- Cooper, I. (2010) 'Inadequate grounds for a design-led' approach to urban renaissance?', *Building Research & Information*, 28(3), pp. 212-219.
- Cooper, M. (2009) *Sunderland: The Challenges of the Future*, London: Centre for Cities.
- Cooper, N. (2017) *City on fire - kingston upon hull 1939-45*. Gloucestershire, UK: Amberley Publishing.
- Costanza, R. (1992) *Ecological economics: the science and management of sustainability*. Columbia University Press.

Couch, C. and Fowles, S. (1992) 'Vacancy and recent structural changes in the demand for land in Liverpool', *Rebuilding the City: Property-led Urban Regeneration*, pp. 100-113.

Couch, C., Sykes, O. and Börstinghaus, W. (2011) 'Thirty years of urban regeneration in Britain, Germany and France: The importance of context and path dependency', *Progress in Planning*, 75(1), pp. 1-52.

Coulson, A. (1990) 'Flagships and flaws: assessing the UDC decade', *Town and Country Planning*, 59(11), pp. 299-302.

Counsell, D. (2007) 'Attitudes to Sustainable Development in Planning: Policy integration, participation and Local Agenda 21, a case-study of the Hertfordshire Structure Plan', *Local Environment*, 4(1), pp. 21-32.

Cowie, J., Heathcott, J. and Bluestone, B. (2003) *Beyond the ruins: The meanings of deindustrialization*. Cornell University Press.

CPRE (2014) *Removing Obstacles to Brownfield Development: How Government can work with communities to facilitate the re-use of previously developed land*: Campaign to Protect Rural England Housing Foresight.

Crisp, R., Pearson, S. and Gore, T. (2015) 'Rethinking the impact of regeneration on poverty: a (partial) defence of a 'failed' policy', *Journal of Poverty and Social Justice*, 23(3), pp. 167-187.

Crosby, N., McAllister, P. and Wyatt, P. (2013) 'Fit for Planning? An Evaluation of the Application of Development Viability Appraisal Models in the UK Planning System', *Environment and Planning B: Planning and Design*, 40(1), pp. 3-22.

Cullingworth, J. B. and Nadin, V. (2006) *Town and country planning in the UK*. London: Routledge.

Cunningham-Sabot, E., Audirac, I., Fol, S. and Martinez-Fernandez, C. (2013) 'THEORETICAL APPROACHES OF "SHRINKING CITIES"', in Pallagst, K., Martinez-Fernandez, C. and Wiechmann, T. (eds.) *Shrinking Cities, International Perspectives and Policy Implications*: Routledge, pp. 14-30.

Cunningham-Sabot, E. and Fol, S. (2009) *Shrinking Cities in France and Great Britain: A Silent Process?*, Berkeley.

Cunningham-Sabot, E. and Roth, H. (2013) 'Growth paradigm against urban shrinkage: A standardized fight? The cases of Glasgow (UK) and Saint-Etienne (France)', *Shrinking Cities. International Perspectives and Policy Implications*; Pallagst, K., Wiechman, T., Martinez-Fernandez, C., Eds, pp. 99-124.

Currie, M. A. and Sorensen, J. (2018) 'Repackaged "urban renewal": Issues of spatial equity and environmental justice in new construction, suburban neighborhoods, and urban islands of infill', *Journal of Urban Affairs*, 41(4), pp. 464-485.

Cuthill, M. (2010) 'Strengthening the 'social' in sustainable development: Developing a conceptual framework for social sustainability in a rapid urban growth region in Australia', *Sustainable Development*, 18(6), pp. 362-373.

Daly, H. E. (2006) 'Sustainable development—definitions, principles, policies', *The future of sustainability*: Springer, pp. 39-53.

Daly, H. E. and Farley, J. (2011) *Ecological economics principles and applications*. Washington: Island Press.

Darwin Holmes, A. G. (2020) 'Researcher Positionality - A Consideration of Its Influence and Place in Qualitative Research - A New Researcher Guide', *Shanlax International Journal of Education*, 8(4), pp. 1-10.

Davis, T. S. 'Brownfields: A comprehensive guide to redeveloping contaminated property'. American Bar Association.

- Davoudi, S. (2010) 'Sustainability: a new vision for the British planning system', *Planning Perspectives*, 15(2), pp. 123-137.
- Davoudi, S. and Cowie, P. (2013) 'Are English neighbourhood forums democratically legitimate?', *Planning Theory & Practice*, 14(4), pp. 562-566.
- DCLG, Government, C.a.L. (2012) *National Planning Policy Framework*. London: HMSO.
- De Magalhães, C. (2015a) 'Urban regeneration', *International encyclopedia of the social & behavioral sciences*, pp. 919-925.
- De Magalhães, C. (2015b) 'Urban Regeneration', in Wright, J.D. (ed.) *International encyclopedia of the social & behavioral sciences*. 2nd ed. nk: Elsevier, pp. 919-925.
- Deakin, N. and Edwards, J. (1993) *The enterprise culture and the inner city*. Psychology Press.
- Deas, I., Robson, B., Wong, C. and Bradford, M. (2016) 'Measuring Neighbourhood Deprivation: A Critique of the Index of Multiple Deprivation', *Environment and Planning C: Government and Policy*, 21(6), pp. 883-903.
- Dennis, N. (1970) *People and Planning. Society Today and Tomorrow* Great Britain: Faber and Faber Ltd.
- Denters, B. and Mossberger, K. (2006) 'Building Blocks for a Methodology for Comparative Urban Political Research', *Urban Affairs Review*, 41(4), pp. 550-571.
- Denzin, N. K. (1970) *Sociological methods: a sourcebook*. London: Butterworths.
- DETR, Environment, T.a.t.R. (1998) *Planning for the communities of the future*. London: Stationery Office (0101388527 9780101388528).
- Detter, D. and Fölster, S. (2017) *The public wealth of cities: How to unlock hidden assets to boost growth and prosperity*. Brookings Institution Press.
- DFID (2014) *Secure property rights and development: Economic growth and household welfare*, London, Glasgow: The Department for International Development.
- Dixon, T. (2007) 'Heroes or villains? The role of the UK property development industry in sustainable urban brownfield regeneration', *Sustainable brownfield regeneration: Liveable places from problem spaces*, pp. 89-118.
- Dixon, T. and Adams, D. (2008) 'Housing Supply and Brownfield Regeneration in a post-Barker World: Is There Enough Brownfield Land in England and Scotland?', *Urban Studies*, 45(1), pp. 115-139.
- Dobson, A. (1996) 'Environment sustainabilities: An analysis and a typology', *Environmental Politics*, 5(3), pp. 401-428.
- Dodds, G. L. (2011) *A history of Sunderland*. Sunderland: Albion Press.
- Dowling, R. (2005) 'Power, subjectivity and ethics in qualitative research', *Qualitative research methods in human geography*. Oxford University Press, pp. 19-29.
- Dunn, K. (2000) 'Interviewing', in Hay, I. (ed.) *Qualitative Research Methods in Human Geography*. Oxford University Press, pp. 50--82.
- DWS (2015) *Extended Phase 1 Habitat Survey: Sunderland Strategic Transport Corridor Phase 3*, Tyne & Wear: Durham Wildlife Services.
- Easton, G. (2010) 'Critical realism in case study research', *Industrial Marketing Management*, 39(1), pp. 118-128.
- Edwards, R. and Holland, J. (2013) *What is qualitative Interviewing? 'What is?' Research Methods series* London: Bloomsbury.
- Flyvbjerg, B. (2006) 'Five Misunderstandings About Case-Study Research', *Qualitative Inquiry*, 12(2), pp. 219-245.

Fol, S. (2012) 'Urban shrinkage and socio-spatial disparities: are the remedies worse than the disease?', *Built Environment*, 38(2), pp. 259-275.

Fol, S. and Cunningham-Sabot, E. (2010) '« Déclin urbain » et Shrinking Cities : une évaluation critique des approches de la décroissance urbaine', *Annales de géographie*, 674(4), pp. 359.

Foo, K., Martin, D., Wool, C. and Polsky, C. (2013) 'The production of urban vacant land: Relational placemaking in Boston, MA neighborhoods', *Cities*, 35, pp. 156-163.

Freeman, A. M., Herriges, J. A. and Kling, C. L. (2014) *The measurement of environmental and resource values : theory and methods*. 3rd ed edn. Washington, DC: Washington, DC : Resources for the Future, c2003.

Freire Trigo, S. (2020) 'Vacant land in London: a planning tool to create land for growth', *International Planning Studies*, 25(3), pp. 261-276.

Fudge, C. and Rowe, J. (2001) 'Ecological modernisation as a framework for sustainable development: a case study in Sweden', *Environment and Planning A*, 33, pp. 1527-1546.

Furdell, K. and Wolman, H. 2006. *Towards understanding urban pathology: Creating a Typology of weak market cities*. Washington DC.

Ganser, R. and Williams, K. (2007) 'Brownfield Development: Are We Using the Right Targets? Evidence from England and Germany', *European Planning Studies*, 15(5), pp. 603-622.

Garvin, E., Branas, C., Keddem, S., Sellman, J. and Cannuscio, C. (2013) 'More than just an eyesore: local insights and solutions on vacant land and urban health', *J Urban Health*, 90(3), pp. 412-26.

Genecon (2008) *Hull Citybuild Interim Evaluation*, Leeds: GENECON Economic and Spatial Regeneration.

Geoghegan, J. (2002) 'The value of open spaces in residential land use', *Land use policy*, 19(1), pp. 91-98.

Gerrard, D. (2010) *A century of Hull*. Stroud: History Press.

Gibbs, D. C., Longhurst, J. and Braithwaite, C. (1998) "Struggling with sustainability": Weak and strong interpretations of sustainable development within local authority policy', *Environment and Planning A*, 30(8), pp. 1351-1365.

Giddings, B., Hopwood, B. and O'brien, G. (2002) 'Environment, economy and society: fitting them together into sustainable development', *Sustainable development*, 10(4), pp. 187-196.

Gilderbloom, J. I., Meares, W. L. and Riggs, W. (2014) 'How brownfield sites kill places and people: an examination of neighborhood housing values, foreclosures, and lifespan', *Journal of Urbanism: International Research on Placemaking and Urban Sustainability*, 9(1), pp. 1-18.

Gillham, B. (2005) *Research Interviewing: The range of techniques: A practical guide*. McGraw-Hill Education (UK).

Goldstein, J., Jensen, M. and Reiskin, E. (2001) *Urban vacant land redevelopment: Challenges and progress*. Lincoln Institute of Land Policy Cambridge, MA.

Goldstein, J. and Reiskin, E. 2001. *Urban Vacant Land Redevelopment: Challenges and Progress*. Cambridge, MA, USAUrban Vacant Land Redevelopment: Challenges and Progress: Lincoln Institute of Land Policy.

Goodchild, B. and Hammond, C. (2013) 'Planning and urban regeneration since 2010: a recipe for conflict and dispute?', *People Place and Policy Online*, 7(2), pp. 82-90.

Goodrick, D. (2014) 'Comparative case studies', *Methodological Briefs: Impact Evaluation*, 9.

- Gray, M. and Barford, A. (2018) 'The depths of the cuts: the uneven geography of local government austerity', *Cambridge Journal of Regions, Economy and Society*.
- Greenberg, M. R., Popper, F. J. and West, B. M. (1990) 'The TOADS A New American Urban Epidemic', *Urban affairs review*, 25(3), pp. 435-454.
- Grodach, C. and Ehrenfeucht, R. (2015) *Urban Revitalization: Remaking cities in a changing world*. Routledge.
- Grossmann, K. 'Declining cities – rising futures? The future prospects for declining cities in relation to development paradigms.', *City Futures*, Chicago, USA, July 2004.
- Gunn, S., Brooks, E. and Vigar, G. (2015) 'The community's capacity to plan: The disproportionate requirements of the new English Neighbourhood Planning initiative', in Davoudi, S. and Madanipour, A. (eds.) *Reconsidering localism*: Routledge, pp. 147-167.
- Gurnham, R. (2011) *The story of Hull*. Andover, Hampshire, England: Phillimore & Co Ltd.
- GVA 2009. Holdness Road Corridor Area Action Plan - Draft. Kingston upon Hull: GVA Grimley/Hull City Council.
- Gwamna, E., Zahari, W. Y. W. and Ismail, M. F. (2015) 'Determinants of Land Use and Property Value', *Advanced Science Letters*, 4(2), pp. 400-407.
- Haase, A., Bernt, M., Grossmann, K., Mykhnenko, V. and Rink, D. (2013) 'Varieties of shrinkage in European cities', *European Urban and Regional Studies*, 23(1), pp. 86-102.
- Haase, A., Hospers, S., Pekelsma, G.-J. and Rink, D. (2012a) *Shrinking Areas: Front-runners in Innovative Citizen Participation*.
- Haase, D., Haase, A., Kabisch, N., Kabisch, S. and Rink, D. (2012b) 'Actors and factors in land-use simulation: The challenge of urban shrinkage', *Environmental Modelling & Software*, 35, pp. 92-103.
- Hackworth, J. (2014) 'The limits to market-based strategies for addressing land abandonment in shrinking American cities', *Progress in Planning*, 90, pp. 1-37.
- Hajer, M. (1992) 'The politics of environmental performance review', in Lykke, E. (ed.) *Achieving Environmental Goals*. Belhaven Press: London. London: Belhaven.
- Hall, P. (1977) 'Inner cities dilemma', *New Society*, 39(748), pp. 223-225.
- Hall, P., Marshall, S. and Lowe, M. (2001) 'The Changing Urban Hierarchy in England and Wales, 1913-1998', *Regional Studies*, 35(9), pp. 34.
- Hall, P. and Tewdwr-Jones, M. (2011) *Urban and regional planning*. London: Routledge.
- Hall, S. (1997) *Representation: Cultural representations and signifying practices*. Sage.
- Hanemann, W. M. (1991) 'Willingness to pay and willingness to accept: how much can they differ?', *The American Economic Review*, 81(3), pp. 635-647.
- Hansen, W. G. (1959) 'How Accessibility Shapes Land Use', *Journal of the American Institute of Planners*, 25(2), pp. 73-76.
- Harding, A. and Nevin, B. (2015) *Cities and Public Policy: A review paper*, London: Foresight, Government Office for Science.
- Haughton, G. (1999) 'Environmental Justice and the sustainable city', *Journal of Planning Education and Research*, (18), pp. 233-243.
- Haughton, G. and Hincks, S. (2013) 'Austerity Planning', *Town and Country Planning*, pp. 6.
- Haughton, G. and Hunter, C. (1994) *Sustainable Cities. Regional Development and Public Policy* London and New York: Routledge.
- HCC (1996) *St Andrew's Dock Appraisal*, Hull: Hull City Council.

HCC (2010) *Hull Character Study - Phase 1*, Hull: Kingston upon Hull City Council.

HCC (2013) *Hull City Plan*. Available at: <http://cityplanhull.co.uk/> (Accessed).

HCC 2014. Heritage Evidence Base. Kingston upon Hull: Hull City Council.

HCC (2017) *Hull Local Plan 2016 to 2032 - - Adopted*, Kingston upon Hull, England: Hull City Council.

Head, B. W. (2008) 'Wicked Problems in Public Policy', *Public Policy*, 3(2), pp. 101-118.

Healey, P. (1992) 'The Reorganisation of State and Market in Planning', *Urban Studies*, 28(3/4), pp. 411-434.

Healey, P. (1997) *Collaborative planning: Shaping places in fragmented societies*. Macmillan International Higher Education.

Healey, P. (2007) *Urban complexity and spatial strategies : towards a relational planning for our times / Patsy Healey*. London: London : Routledge, 2007.

Henderson, M., Ryan, T. and Phillips, M. (2019) 'The challenges of feedback in higher education', *Assessment & Evaluation in Higher Education*, pp. 1-16.

Heritage, F.-F. o. J. (2022) *Synagogue in Sunderland, England*. Available at: <https://www.foundationforjewishheritage.com/sunderland> (Accessed: 29 January 2022).

Herrmann, D., Shuster, W., Mayer, A. and Garmestani, A. (2016) 'Sustainability for Shrinking Cities', *Sustainability*, 8(9), pp. 911.

Heseltine, M. (2013) *No Stone Unturned in pursuit of growth*, London: DBIS.

Historic_England 2017. Heritage Action Zone: Explanatory notes and Guidance.

HMGovernment, Environment, D.o.t. (1994) *Sustainable Development: The UK Strategy*. London: HMSO.

HMGovernment, DETR (1999) *A better quality of life: A strategy for sustainable development in the UK*. London: HMSO.

HMGovernment, DEFRA (2005) *Securing the future: delivering UK sustainable development strategy*. London UK: HMSO.

HMT and BIS, HM Treasury and Business, I.a.S. (2013) *Government Response to the Heseltine Review*. London: The Stationary Office.

Hollander, J. B., Pallagst, K., Schwarz, T. and Popper, F. J. 'Planning Shrinking Cities', 9 January.

Home, R. K. (1983) 'Inner city vacant land: UK Policies', *Cities*.

Humber_LEP (2015) *Humber Enterprise Zone: The UK's Energy Estuary*.

Imrie, R. and Thomas, H. (1999) *British urban policy : an evaluation of the urban development corporations*. London: Sage Publications.

InterTech (N/K) *The Heritage Dock*. Kingston upon Hull. Available at: <http://www.hullnow.co.uk/concepts/heritage-dock> (Accessed).

Jabareen, Y. (2006) 'A New Conceptual Framework for Sustainable Development', *Environment, Development and Sustainability*, 10(2), pp. 179-192.

Jackle, A., Roberts, C. and Lynn, P. 2006. Telephone versus Face-to-Face Interviewing: Mode Effects on Data Quality and Likely Causes. *Report on Phase II of the ESS-Gallup Mixed Mode Methodology Project*. Institute for Social and Economic Research, University of Essex.

Jessen, J. (2012) 'Conceptualizing shrinking cities—a challenge for planning theory', in Ganser, R. and Piro, R. (eds.) *Parallel Patterns of Shrinking Cities and Urban Growth: Spatial Planning for Sustainable Development of City Regions and Rural Areas*, pp. 45-58.

- Johnson, P. A., Belblidia, N. and Campbell, S. (2011) "Neogeographic Tools to Create Open-access Data: Mapping Vacant Land Parcels in Detroit.", *URISA Journal*, 23(2), pp. 5.
- Johnson, R. B. and Onwuegbuzie, A. J. (2004) 'Mixed Methods Research: A Research Paradigm Whose Time Has Come', *Educational Researcher*, 33(7), pp. 14.
- Jonas, A. E. G., Wurzel, R. K. W., Monaghan, E. and Osthorst, W. (2017) 'Climate change, the green economy and reimagining the city: the case of structurally disadvantaged European maritime port cities', *Die Erde*, 148(4), pp. 15.
- Jones, B. (2010) 'Slum Clearance, Privatization and Residualization: the Practices and Politics of Council Housing in Mid-twentieth-century England', *Twentieth Century British History*, 21(4), pp. 510-539.
- Jones, C., Leishman, C. and MacDonald, C. (2009) 'Sustainable urban form and residential development viability', *Environment and planning A*, 41(7), pp. 1667-1690.
- Jones, P. and Evans, J. (2008) *Urban regeneration in the UK*. 1st edn.
- Jones, P. and Evans, J. (2013) *Urban Regeneration in the UK*. 2nd edn. London: Sage.
- Jones, P. N. (1998) "'...a fairer and nobler City' - Lutyens and Abercrombie's Plan for the City of Hull 1945", *Planning Perspectives*, 13(3), pp. 301-316.
- Kantor, P. and Savitch, H. V. (2005) 'How to study comparative urban development politics: A research note', *International Journal of Urban and Regional Research*, 29(1), pp. 135-151.
- Kidd, C. V. (1992) 'The evolution of sustainability', *Journal of Agricultural and Environmental Ethics*, 5(1), pp. 1-26.
- Kim, G. (2016) 'The Public Value of Urban Vacant Land: Social Responses and Ecological Value', *Sustainability*, 8(5), pp. 486.
- Kim, G., Miller, P. A. and Nowak, D. J. (2015) 'Assessing urban vacant land ecosystem services: Urban vacant land as green infrastructure in the City of Roanoke, Virginia', *Urban Forestry & Urban Greening*, 14(3), pp. 519-526.
- Kim, G., Miller, P. A. and Nowak, D. J. (2018) 'Urban vacant land typology: A tool for managing urban vacant land', *Sustainable Cities and Society*, 36, pp. 144-156.
- Kivell, P. (1993) *Land and the city : patterns and processes of urban change*. London and New York: Routledge.
- Knaap, G. (1998) 'The Determinants of Residential Property Values: Implications for Metropolitan Planning', *Journal of Planning Literature*, 12(3), pp. 16.
- Kohlhepp, D. B. 'The Real Estate Development Matrix'. *The American Real Estate Society Meetings*.
- Koziol, M. (2004) *The Consequences of Demographic Change for Municipal Infrastructure*. Available at: <https://difu.de/publikationen/the-consequences-of-demographic-change-for-municipal.html> (Accessed: 15 November 2016).
- Kumar, K. (1989) *Conducting Key Informant Interviews in Developing Countries*: Agency for International Development.
- LaGro, J. A. (2008) *Site analysis : a contextual approach to sustainable land planning and site design*. 2nd ed.. edn. Hoboken, N.J.: Hoboken, N.J. : John Wiley & Sons.
- Lambert, T. (nk) *A History of Sunderland*. Available at: <https://localhistories.org/a-history-of-sunderland/> (Accessed: 18 January 2022 2022).
- Landscape_Institute (2018) *Townscape Character Assessment: Technical Information Note 05/2017*, London: Landscape Institute.

- Latham, A. (2003) 'Research, Performance, and Doing Human Geography: Some Reflections on the Diary-Photograph, Diary-Interview Method', *Environment and Planning A*, 35(11), pp. 1993-2017.
- Lawless, P. (1986) *The evolution of spatial policy : a case study of inner-urban policy in the United Kingdom, 1968-1981*. London: Pion.
- Leary-Owhin, M. E. a. (2016) *Exploring the production of urban space : differential space in three post-industrial cities / Michael Edema Leary-Owhin*. Bristol : Policy Press, 2016.
- Lee, J. (2010) 'Vaguely Northern: in between in England', in Goldie, C. and White, D. (eds.) *Northern Light. Landscape, Photography and Evocations of the North*, pp. 133-42.
- Lee, J. and Newman, G. (2017) 'Forecasting Urban Vacancy Dynamics in a Shrinking City: A Land Transformation Model', *ISPRS International Journal of Geo-Information*, 6(4), pp. 18.
- Lee, R. J. and Newman, G. (2019) 'A classification scheme for vacant urban lands: integrating duration, land characteristics, and survival rates', *J Land Use Sci*, 14(4-6), pp. 306-319.
- Lees, L. (2003) 'Visions of "urban renaissance": the Urban Task Force report and the Urban White Paper', in Imrie, R. and Raco, M. (eds.) *Urban renaissance: New labour, community and urban policy*. Bristol: The Polcy Press, pp. 61-82.
- LGA (2013) *Neighbourhood Planning: A simple guide for Councillors*, London: Local Government Association.
- Lichfields (2018) *Local choices? Housing delivery through Neighbourhood Plans*, London: Nathaniel Lichfield & Partners Limited.
- Lin, W. (2013) 'Situating Performative Neogeography: Tracing, Mapping, and Performing "Everyone's East Lake"', *Environment and Planning A*, 45(1), pp. 37-54.
- Longhurst, R. (2010) 'Semi-structured interviews and focus groups', *Key methods in geography*, pp. 117-132.
- Longo, A. and Campbell, D. (2016) 'The Determinants of Brownfields Redevelopment in England', *Environmental and Resource Economics*, 67(2), pp. 261-283.
- Longo, A. and Campbell, D. (2017) 'The Determinants of Brownfields Redevelopment in England', *Environmental and Resource Economics*, 67(2), pp. 261-283.
- Loures, L. (2015) 'Post-industrial landscapes as drivers for urban redevelopment: Public versus expert perspectives towards the benefits and barriers of the reuse of post-industrial sites in urban areas', *Habitat International*, 45, pp. 72-81.
- Lowe, J. (2008) 'Value for money and the valuation of public sector assets', *Green Book*. London: HM Treasury, pp. 12.
- Lozano, R. (2008) 'Envisioning sustainability three-dimensionally', *Journal of Cleaner Production*, 16(17), pp. 1838-1846.
- Lupton, R. and Fitzgerald, A. 2015a. The Coalition's record on Area Regeneration and Neighbourhood Renewal 2010-2015. London: London School of Economics.
- Lupton, R. and Fitzgerald, A. 2015b. The Coalition's Record on Area Regeneration and Neighbourhood Renewal 2010-2015. *Summary Working Paper 19*. London: London School of Economics.
- Macleod, G. and Johnstone, C. (2012) 'Stretching Urban Renaissance: Privatizing Space, Civilizing Place, Summoning 'Community'', *International Journal of Urban and Regional Research*, 36(1), pp. 1-28.

Madill, A., Jordan, A. and Shirley, C. (2000) 'Objectivity and reliability in qualitative analysis: Realist, contextualist and radical constructionist epistemologies', *British Journal of Psychology*, 91, pp. 1-20.

Mallach, A. (2012) 'Depopulation, Market Collapse and Property Abandonment: Surplus Land and Buildings in Legacy Cities', in Mallach, A. (ed.) *REBUILDING AMERICA'S LEGACY CITIES: New Directions for the Industrial Heartland*. Columbia, USA: The American Assembly, Columbia University, pp. 30.

Mariani, M. and Barron, P. (2014) *Terrain vague : interstices at the edge of the pale*. First edition.. edn.: London : Routledge, Taylor & Francis Group.

Markusen, A. (1999) 'Four structures for second tier cities', *Second tier cities: Rapid growth beyond the metropolis*, pp. 21-42.

Marra, G., Barosio, M., Eynard, E., Marietta, C., Tabasso, M. and Melis, G. (2016) 'From urban renewal to urban regeneration: Classification criteria for urban interventions. Turin 1995–2015: Evolution of planning tools and approaches', *Journal of Urban Regeneration & Renewal*, 9(4), pp. 367-380.

Marshall, J. N. (2007) 'Business services, the regions and regional policy', *Regional Studies*, 19(4), pp. 353-363.

Marshall, N. and Jaeger, C. (1990) 'Service activities and uneven spatial development in Britain and its European partners: determinist fallacies and new options', *Environment and Planning A*, 22, pp. 1337-1354.

Martin, R., Gardiner, B. and Tyler, P. (2014) *The evolving economic performance of UK cities: city growth patterns 1981-2011*, London: Foresight, Government Office for Science.

Martin, R., Sunley, P., Tyler, P. and Gardiner, B. (2016a) 'Divergent cities in post-industrial Britain', *Cambridge Journal of Regions, Economy and Society*, 9(2), pp. 269-299.

Martin, R., Sunley, P., Tyler, P. and Gardiner, B. (2016b) *Divergent cities in post-industrial Britain*, London: Foresight, Government Office for Science.

Martinez-Fernandez, C., Audirac, I., Fol, S. and Cunningham-Sabot, E. (2012) 'Shrinking Cities: Urban Challenges of Globalization', *International Journal of Urban and Regional Research*, 36(2), pp. 213-225.

Massey, D. and Meegan, R. (2014) *The Anatomy of Job Loss (Routledge Revivals): The How, Why and Where of Employment Decline*. Routledge.

McCann, E. and Ward, K. (2012) 'Assembling urbanism: following policies and 'studying through'the sites and situations of policy making', *Environment and Planning A*, 44(1), pp. 42-51.

McCarthy, J. (2007) *Partnership, collaborative planning and urban regeneration*. Ashgate Publishing, Ltd.

McFarlane, C. (2010) 'The comparative city: knowledge, learning, urbanism', *International journal of urban and regional research*, 34(4), pp. 725-742.

McGreal, S., Adair, A., Berry, J., Deddis, B. and Hirst, S. (2000) 'Accessing private sector finance in urban regeneration: investor and non-investor perspectives', *Journal of Property Research*, 17(2), pp. 109-131.

McNamara, P. (1983) 'Towards a classification of land developers', *Urban Law and Policy*, 6(1), pp. 87-94.

Meyer, P. B. and Lyons, T. S. (2000) 'Lessons from private sector brownfield redevelopers: Planning public support for urban regeneration', *Journal of the American Planning Association*, 66(1), pp. 46-57.

MHCLG (2018) *Land value estimates for policy appraisal - May 2017 Values*, London: Ministry of Housing, Communities and Local Government.

- Mikecz, R. (2012) 'Interviewing Elites', *Qualitative Inquiry*, 18(6), pp. 482-493.
- Moretti, E. (2012) *The new geography of jobs*. Houghton Mifflin Harcourt.
- Mullins, D., Murie, A. and Leather, P. (2006) *Housing Policy in the UK*. Palgrave.
- Murphy, K. (2012) 'The social pillar of sustainable development: a literature review and framework for policy analysis', *Sustainability: Science, Practice and Policy*, 8(1), pp. 15.
- Nel, E. L., Hill, T. R., Aitchison, K. C. and Buthelezi, S. (2003) 'The closure of coal mines and local development responses in Coal-Rim Cluster, northern KwaZulu-Natal, South Africa', *Development Southern Africa*, 20(3), pp. 369-385.
- Neumark, D. and Simpson, H. (2015) 'Place-based policies', *Handbook of regional and urban economics*: Elsevier, pp. 1197-1287.
- Newman, G. D., Bowman, A. O. M., Jung Lee, R. and Kim, B. (2016) 'A current inventory of vacant urban land in America', *Journal of Urban Design*, 21(3), pp. 302-319.
- nk nk. Shipbuilding on the Wear Part 1. Sunderland: Sunderland Local Studies Centre.
- NLP (2014) *Hull Employment Land Review Final Report*, Leeds: Nathaniel Lichfield & Partners50273/MS/RL).
- NLP (2016) *Sunderland Employment Land Review Final Report*, Newcastle.
- Novick, G. (2008) 'Is there a bias against telephone interviews in qualitative research?', *Res Nurs Health*, 31(4), pp. 391-8.
- O'Brien, P. and Pike, A. (2015) 'City deals, decentralisation and the governance of local infrastructure funding and financing in the UK', *National Institute Economic Review*, 233(1), pp. R14-R26.
- Oatley, N. (1998) 'Cities, Economic Competition and Urban Policy', in Oatley, N. (ed.) *Cities, Economic Competition and Urban Policy*. London: Paul Chapman.
- Oatley, N. and Lambert, C. (1998) 'Catalyst for change: the City Challenge initiative', *Cities, economic competition and urban policy*, pp. 109-126.
- ODPM, Minister, O.o.t.D.P. (2003) *Sustainable communities: building for the future*. London: HMSO.
- ODPM, Minister, O.o.t.D.P. (2005) *Planning Policy Statement 1: Delivering Sustainable Development*. London: HMSO.
- Padilla, E. (2002) 'Intergenerational equity and sustainability', *Ecological Economics*, 41(1), pp. 69-83.
- Pagano, M. A. and Bowman, A. O. M. (2000) *Vacant Land in Cities: An Urban Resource*: The Brookings Institution.
- Pallagst, K. (2015) 'Shrinking Cities: Planning Challenges from an International Perspective'.
- Park, S. and Sohn, D. (2013) 'The roles of urban design in urban regeneration: case studies of the Housing Market Renewal Pathfinder area in Newcastle, UK', *International Journal of Urban Sciences*, 17(3), pp. 316-330.
- Parker, G. and Slater, K. (2017) 'Taking Stock of Neighbourhood Planning in England 2011–2016', *Planning Practice & Research*, 12(4), pp. 478-490.
- PAS 2014. Soundness Self-Assessment Checklist. London: Planning Advisory Service.
- Pearce, D., Markandya, A. and Barbier, E. B. (2006) *Blueprint for a green economy*. London: Earthscan.
- Peck, J. (2003) 'Geography and public policy: mapping the penal state', *Progress in Human Geography*, 27(2), pp. 222-232.

- Peet, R. (1998) *Modern geographical thought*. Oxford. Malden, MA : Blackwell Publishers.
- Pendlebury, J. and Strange, I. (2011) 'Centenary paper: Urban conservation and the shaping of the English city', *Town Planning Review*, 82(4), pp. 361-392.
- Pereira, G. C. 'Urban Voids: mapping and classification of urban land in Salvador', *17th European Colloquium on Quantitative and Theoretical Geography*.
- Pickvance, C. G. (2001) 'Four varieties of comparative analysis', *Journal of Housing and the Built Environment*, 16(1), pp. 7-28.
- Pike, A., MacKinnon, D., Coombes, M., Champion, T., Bradley, D., Cumbers, A., Robson, L. and Wymer, C. (2016) *Uneven growth: tackling city decline-report*. Joseph Rowntree Foundation.
- Pike, A., Rodríguez-Pose, A. and Tomaney, J. (2007) 'What Kind of Local and Regional Development and for Whom?', *Regional Studies*, 41(9), pp. 1253-1269.
- Plöger, J. (2012) 'Learning from Abroad: Lessons from European Shrinking Cities', *NEW DIRECTIONS FOR THE INDUSTRIAL HEARTLAND*, pp. 295-321.
- Plöger, J. (2013) 'Comeback cities? Urban recovery approaches in European industrial cities'.
- Pollakowski, H. O. and Wachter, S. M. (1990) 'The Effects of Land-Use Constraints on Housing Prices', *Land Economics*, 66(3), pp. 315-324.
- Portney, K. E. (2013) *Taking sustainable cities seriously : economic development, the environment, and quality of life in american cities*. Cambridge, Mass. [u.a.]: MIT Press.
- Potter, J. and Moore, B. (2000) 'UK Enterprise Zones and the Attraction of Inward Investment', *Urban Studies*, 37(8), pp. 1279–1312.
- Power, A. 2010. Phoenix cities the fall and rise of great industrial cities. *In*: Plöger, J. and Winkler, A. (eds.). Bristol: Bristol : Policy Press.
- Power, A., Plöger, J. and Winkler, A. (2006) *Transforming cities across Europe: An interim report on problems and progress*.
- Power, A. and Wilson, W. J. 2000. Social Exclusion and the Future of Cities. London: STICERD, London School of Economics.
- Quental, N., Lourenço, J. M. and da Silva, F. N. (2011) 'Sustainable development policy: goals, targets and political cycles', *Sustainable Development*, 19(1), pp. 15-29.
- Raco, M. and Savini, F. (2019) 'The Rise of New Urban Technology', *The Rise of a New Urban Technocracy in Raco M, & Savini, F. (2019) Planning and Knowledge - How New Forms of Technocracy Are Shaping Contemporary Cities*. Bristol: Policy Press.
- Ramdewor, K. 2011. Vacant Land Audit in the city of Cape Town: Analysis for determining suitable vacant land for Social Housing. *In*: Town, U.o.C. (ed.). South Africa: University of Cape Town.
- Raynesford, N. (1998) *Hansard written answers to parliamentary questions*. London: Stationary Office.
- Reckien, D. and Martinez-Fernandez, C. (2011) 'Why Do Cities Shrink?', *European Planning Studies*, 19(8), pp. 1375-1397.
- Reed, M. S., Graves, A., Dandy, N., Posthumus, H., Hubacek, K., Morris, J., Prell, C., Quinn, C. H. and Stringer, L. C. (2009) 'Who's in and why? A typology of stakeholder analysis methods for natural resource management', *J Environ Manage*, 90(5), pp. 1933-49.

- Revell, A. (2005) 'Ecological modernization in the UK: rhetoric or reality?', *European Environment*, 15(6), pp. 344-361.
- Rink, D., Hasse, A., Bernt, M. and Mykhnenko, V. (2010) *WP3 Shrink Smart Discussion Paper on cross cutting themes*.
- Roberts, P., Sykes, H. and Granger, R. (2017) *Urban regeneration*. 2nd edn. Los Angeles: SAGE.
- Robinson, J. (2011) 'Cities in a world of cities: the comparative gesture', *International journal of urban and regional research*, 35(1), pp. 1-23.
- Robson, B. T. (1980) *Urban analysis : a study of city structure with special reference to Sunderland*. Cambridge [England]: University Press.
- RT&P (2003) *THE RENAISSANCE OF HULL CITY CENTRE: A Masterplan to Guide Planning and Investment*, Leicester: Hull Citybuild.
- Ryan-Collins, J., Lloyd, T. and Macfarlane, L. (2017) *Rethinking the economics of land and housing*. London: ZED Books/New Economics Foundation.
- Rybczynski, W. and Linneman, P. D. (1999) 'How To Save Our Shrinking Cities', *Public Interest*, 135(Spring).
- Rydin, Y. (2013) *The future of planning : beyond growth dependence*. Bristol: Policy Press.
- Sa, F. (2017) 'Effect of Foreign Investors on Local Housing Markets: Evidence from the UK.', pp. 43, Available: Kings College London.
- Salite, I. and Pipere, A. (2006) 'Aspects of Sustainable Development from the Perspective of Teachers', *Journal of Teacher Education and Training*, 6, pp. 15-32.
- Samuel, R. (2012) *Theatres of memory : past and present in contemporary culture / Raphael Samuel*. Rev. ed edn. London: London : Verso, 2012.
- Sayer, A. and Morgan, K. (1985) 'A modern industry in a declining region: links between method, theory and policy', in Massey, D. and Meegan, R. (eds.) *Politics and Method: Constrasting studies in industrial geography*. London: Methuen, pp. 147-168.
- SCC (2010) *Sunderland Economic Master Plan*.
- SCC (2017) *Core Strategy and Development Plan 2015-2033*. Sunderland: Sunderland City Council.
- Schlappa, H. and Neill, W. J. V. (2013) *From crisis to choice: Reimagining the future in shrinking cities*, France: URBACT.
- Schlesinger, A. (1998) 'The regeneration of peripheral council estates - a case study in Sunderland.', *Urban Studies*, PhD, pp. 316.
- Schwartz, T. (2013) 'Rethinking the Places in Between: Stabilization, Regeneration and Reuse', pp. 167-188.
- Schwarz, S. (2013) *Weak Market Cities and Sustainable Development*.
- Shaw, D. and Lord, A. (2009) 'From land-use to 'spatial planning': Reflections on the reform of the English planning system', *Town Planning Review*, 80(4-5), pp. 415-436.
- Shaw, K. and Robinson, F. (2010) 'Centenary paper: UK urban regeneration policies in the early twenty-first century: Continuity or change?', *Town Planning Review*, 81(2), pp. 123-150.
- Shephard, J. and Dixon, T. (2004) *The role of the UK development industry in brownfield regeneration*, Reading: College of Estate Managemt (1904388337).
- Shetty, S. (2009) *Shrinking Cities in the Industrial Belt: A focus on small and mid-sized cities in northwestern ohio*, Toledo, Ohio: Urban Affairs Center, The University of Toledo.
- Short, M. and Fundingsland Tetlow, M. (2012) 'Sunderland', *Cities*, 29(4), pp. 278-288.

Smith, H. and Garcia Ferrari, M. S. (2012) 'Waterfront regeneration experiences in city-building'.

Sola-Morales Rubio, I. d. (1995) 'Terrain Vague', in Davidson, C.C. (ed.) *Anyplace*. Cambridge: Anyone Corporation, pp. 123-132.

Staddon, C., De Vito, L., Zuniga-Teran, A., Schoeman, Y., Hart, A. and Booth, G. (2017) *Contributions of Green Infrastructure to Enhancing Urban Resilience Agenda Setting Scoping Studies Summary Report*.

Staddon, C., Ward, S., De Vito, L., Zuniga-Teran, A., Gerlak, A. K., Schoeman, Y., Hart, A. and Booth, G. (2018) 'Contributions of green infrastructure to enhancing urban resilience', *Environment Systems and Decisions*, 38(3), pp. 330-338.

Starkey, D. J. (2017) *Hull : culture, history, place*. Liverpool: Liverpool University Press.

Stavins, R. N., Wagner, A. F. and Wagner, G. (2003) 'Interpreting sustainability in economic terms: dynamic efficiency plus intergenerational equity', *Economics Letters*, 79(3), pp. 339-343.

Stø, E., Strandbakken, P., Rubik, F. and Scheer, D. (2005) 'Background: theoretical contributions, eco-labels and environmental policy', *The Future of Eco-labelling: Making Environmental Product Information Systems Effective*, pp. 16-45.

Stohr, W. and Todtling, F. (1979) 'Spatial equity: some anti-theses to current regional development doctrine', *Spatial Inequalities and Regional Development*, pp. 133-160.

Storm, A. (2016) *Post-industrial landscape scars*. Basingstoke; New York (N.Y.): Palgrave Macmillan.

Storper, M. (2013) *Keys to the city: How economics, institutions, social interaction, and politics shape development*. Princeton University Press.

Strangleman, T. and Rhodes, J. (2014) 'The 'New' Sociology of Deindustrialisation? Understanding Industrial Change', *Sociology Compass*, 8(4), pp. 411-421.

Strauß, C. (2016) 'The Importance of Strategic Spatial Goals for the Planning Process under Shrinkage Tendencies', in Ganser, R. and Piro, R. (eds.) *Parallel Patterns of Shrinking Cities and Urban Growth: Spatial Planning for Sustainable Development of City Regions and Rural Areas*, pp. 83.

Sunley, P., Martin, R. and Tyler, P. (2017) 'Cities in transition: problems, processes and policies', *Cambridge Journal of Regions, Economy and Society*, 10(3), pp. 383-390.

Swinney, P. and Carter, A. (2012) *Hidden Potential: Fulfilling the economic potential of mid-sized cities*, London: Centre for Cities.

Syms, P. (2001) *Obstacles to the release of brownfield sites for redevelopment*, York: Joseph Rowntree Foundation.

Syms, P. M. (2010) *Land, development and design*. 2nd edn. Oxford: Wiley-Blackwell.

Tallon, A. (2013) *Urban regeneration in the UK*. London; New York: Routledge.

TCPA (2016) *a crisis of place: Are we delivering sustainable development through local plans?*, London: Town and Country Planning Association.

Tewdwr-Jones, M. (2012) *Spatial planning and governance : understanding UK planning*. Basingstoke: Palgrave Macmillan.

Thomas, H. and Imrie, R. (1997) 'Urban Development Corporations and Local Governance in the UK', *Tijdschrift voor economische en sociale geografie*, 88(1), pp. 53-64.

Thompson, M. (1989) *Fish Dock: Story of St.Andrews Dock, Hull*. Beverly: Hutton Press Ltd, p. 118.

- Tranel, M. and Handlin, L. B. (2016) 'Metromorphosis: Documenting Change', *Journal of Urban Affairs*, 28(2), pp. 151-167.
- Turok, I. 'Urban regeneration: What can be done and what should be avoided'. *Istanbul 2004 International Urban Regeneration Symposium: Workshop of Kucukcekmece District*, 57-62.
- Turok, I. (2015) 'Redundant and marginalized spaces.', in Paddison, R. and Hutton, T. (eds.) *Cities and economic change: restructuring and dislocation in the global metropolis*. London: Sage, pp. 74-92.
- Turok, I. and Mykhnenko, V. (2007) 'The trajectories of European cities, 1960–2005', *Cities*, 24(3), pp. 165-182.
- Tyler, P., Warnock, C., Provins, A. and Lanz, B. (2012) 'Valuing the Benefits of Urban Regeneration', *Urban Studies*, 50(1), pp. 169-190.
- UKCC (2009) *UK City of Culture: Working Group Report*, London: Department of Culture Media and Sport.
- UrbanAudit (2007) *State of European Cities Report: European Union Regional Policy*.
- UrbanTaskForce (1999) *Towards an urban renaissance*, London: London : Spon.
- Vallance, S., Perkins, H. C. and Dixon, J. E. (2011) 'What is social sustainability? A clarification of concepts', *Geoforum*, 42(3), pp. 342-348.
- Vis, F., Jackson, P., Miles, A., Ochu, E., Humphrey, I., Manyukhina, Y., Flower, S., Roberts, R. and Ward, C. (2014) *Everyday Growing Cultures in the North of England: participation, citizenship and local economies: Communities & Culture Network+*. Available at: <http://www.communitiesandculture.org/files/2013/02/EGC-Final-Report.pdf>.
- Vogl, S. (2013) 'Telephone Versus Face-to-Face Interviews', *Sociological Methodology*, 43(1), pp. 133-177.
- Vries, W. T. d. and Voß, W. (2018) 'Economic Versus Social Values in Land and Property Management: Two Sides of the Same Coin?', *Raumforschung und Raumordnung*, 76(5), pp. 381-394.
- Waas, T., Hugé, J., Verbruggen, A. and Wright, T. (2011) 'Sustainable Development: A Bird's Eye View', *Sustainability*, 3(12), pp. 1637-1661.
- Waite, D. and Morgan, K. (2018) 'City Deals in the polycentric state: The spaces and politics of Metrophilia in the UK', *European Urban and Regional Studies*.
- Walker, S. (2015) 'Urban agriculture and the sustainability fix in Vancouver and Detroit', *Urban Geography*, 37(2), pp. 163-182.
- Ward, K. (2009) 'Towards a relational comparative approach to the study of cities', *Progress in Human Geography*, 34(4), pp. 471-487.
- Ward, S. (2004) *Planning and urban change*. Sage.
- WCED 1987. *Our common future: The World Commission on development and the environment*. Oxford: Oxford University Press.
- Wear_Books (1990) *Sunderland in the Blitz*. Sunderland: Sunderland Leisure Services Department.
- Weaver, R. and Holtkamp, C. (2015) 'Geographical Approaches to Understanding Urban Decline: From Evolutionary Theory to Political Economy...and Back?', *Geography Compass*, 95, pp. 17.
- Weaver, R. C. and Bagchi-Sen, S. (2013) 'Spatial analysis of urban decline: The geography of blight', *Applied Geography*, 40, pp. 61-70.
- Wiechmann, T. and Wolff, M. 'Urban Shrinkage in a Spatial Perspective - Operationalization of Shrinking Cities in Europe 1990-2010', *AESOP-ACSP Congress*, Dublin, 15-19 July, 20.

- Wightman, A. (2013) *A Land Value Tax for England: Fair, Efficient, Sustainable*, London: Report Commission by Caroline Lucas, MP.
- Williams, K. (2012) 'The quantitative and qualitative impacts of brownfield policies in England', in Hula, R.C., Reese, L.A. and Jackson-Elmoore, C. (eds.) *Reclaiming Brownfields: A comparative analysis of adaptive reuse of contaminated properties Global Urban Studies*. London: Routledge.
- Williams, K. and Dair, C. (2007) 'A framework for assessing the sustainability of brownfield developments', *Journal of Environmental Planning and Management*, 50(1), pp. 23-40.
- Wiltshaw, D. G. (1986) 'Land Investment, Planning Permission, and Uncertainty: A State-Preference Analysis', *Environment and Planning A: Economy and Space*, 18(2), pp. 207-215.
- Winther, L. (2007) 'Location dynamics of business services in the urban landscape of Copenhagen: Imaginary spaces of location', *Belgeo*, (1), pp. 51-72.
- Wolfe, C. R. (2017) *Seeing the better city : how to explore, observe, and improve urban space*.
- Wolff, M. and Wiechmann, T. (2017) 'Urban growth and decline: Europe's shrinking cities in a comparative perspective 1990–2010', *European Urban and Regional Studies*, pp. 096977641769468.
- Yanow, D. (2006) 'Qualitative-Interpretive Methods in Policy Research', in Fisher, F.e.a. (ed.) *Handbook of Public Policy Analysis*, pp. 405-415.
- Yeung, H. W.-c. (1997) 'Critical realism and realist research in human geography: a method or a philosophy in search of a method?', *Progress in Human Geography*, 21, pp. 51-74.
- Yin, R. K. (2013) *Case study research : design and methods / Robert K. Yin*. Fifth edition edn.: Thousand Oaks : SAGE Publications, Inc, 2013.
- Zerbe Jr, R. O. and McCurdy, H. E. (1999) 'The failure of market failure', *Journal of Policy Analysis and Management*, 18(4), pp. 558-578.
- Zuindeau, B. (2006) 'Spatial approach to sustainable development: Challenges of equity and efficacy', *Regional Studies*, 40(5), pp. 459-470.
-