





Work package 2

Urban shrinkage in Liverpool, United Kingdom

Research report	
D4 Comparable research report	

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30 March 2010

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1. EXECUTIVE SUMMARY

Liverpool has undergone a long period of change over the past four decades. During the 1970s and 1980s the conurbation experienced massive deindustrialisation and economic restructuring which led to a period of rapid population decline. Within the conurbation a combination of housing policies and an outward movement of jobs stimulated a faster rate of population decline in the core city than in the periphery of the conurbation. The population of the core city, Liverpool, fell from 610,000 in 1971 to 435,000 in 2008 (-29%), whilst the population of the conurbation, Merseyside, fell from 1,656,000 to 1,347,000 over the same period (-19%).

Subsequently the development of strong policies for urban regeneration coupled with powerful restraints on peripheral growth slowed the rate of population loss. A series of regeneration policies and agencies including the Merseyside Development Corporation, City Challenge, the Single Regeneration Budget Challenge Fund, English Partnerships, EU Objective One funding from 1993-2007, and others including Liverpool Vision, have all put resources into the redevelopment of the existing city. At the same time national policies directing housing investment towards existing urban areas, strong direction of regional growth and local 'green belt' and related policies have collectively brought a high level of restraint and resistance to pressures for peripheral growth. Since the 1990s the emerging trend towards economic growth based upon a post-industrial economy (growth based upon services) has led to a revival of the core city to the point where it is now on the cusp of reurbanisation.

The consequences of population decline have been seen particularly in the housing system where a housing shortage in 1971 (0.99 dwellings per household) became a surplus after 1991 (1.05 dph in 2001). This facilitated the removal of some of the least sought after dwellings from the housing stock. A number of surplus social housing stock were removed through Estate Action and by the Housing Action Trust. More recently a policy of Housing Market Renewal has seen a return to substantial level of clearance in the older private housing stock. Nevertheless the housing system remained quite well balanced over the period, with vacancy rates generally no more than one and a half times the national average and only briefly rising above 6%. Furthermore dwelling prices in the core city have rarely fluctuated significantly from a fairly consistent position at around 70% of the national average.

The period of intense population decline was also associated with a high rate of unemployment which stood above 20% in the core city throughout the 1980s. However, with the improving national economic situation in the 1990s and more in the service sector (especially financial services, public administration, education, health and leisure services), unemployment in the core city fell steadily after 1991. Since the millennium the unemployment rate has been below 10%. In terms of service provision the biggest impact of population decline has been on the provision of schools. Although the position is complicated by parental choice and private sector provision, the City Council has over the decades undertaken a number of rationalisations of school provision resulting in the closure of a considerable number of schools. Overall the study of Liverpool shows the dynamics of urban change and decline but most importantly it shows how with a combination of strong urban regeneration policies complementing a changing in economic structure, a city can move from a period of shrinkage towards reurbanisation.

2. PATTERNS OF URBAN SHRINKAGE

INTRODUCTION

This report describes the process of shrinkage as it has occurred within the city of Liverpool; it examines the dynamics and patterns of change, the consequences of change and the responses of policy makers. The period covered in the report runs from the 1970s to the present day: nearly 40 years. Over that time the city has moved from a period of rapid decline to a point where it is on the cusp of reurbanisation.

"The process of reurbanisation involves the movement of people back into the cities and in particular the repopulation of the city centre and inner ring. It has been argued that reurbanisation represents a phase of urban development in a recognisable urban life-cycle model (van den Berg & Klassen, 1987). The model identified four broad development phases; urbanisation, suburbanisation, disurbanisation and reurbanisation. phase is sub-divided into two stages relating to differences in the rate of population change in both the core and the suburban ring resulting in a more sophisticated eight-stage model highlighting the potential for both relative and absolute population growth and decline. According to the model the initial phases of urbanisation and suburbanisation indicate a period of overall growth for the urban area but gradually net migration gains are outweighed by net migration losses leading to a phase of disurbanisation (or counterurbanisation) as population decline in the core is replicated in the suburbs leading to overall decline. According to the model, reurbanisation begins with relative growth in the core (i.e., as population levels stabilise in the core they continue to decline in the suburbs) and peaks with absolute population growth in the urban core and suburbs" (Couch C, Fowles S & Karecha J, 2009).

This approaching reurbanisation has not come about by accident but is the result of strong urban regeneration policies that have been implemented by successive governments over a long period of time. There are clear interrelationships between socio-economic trends and policy interventions. For this reason the report devotes quite a lot of space to the consideration of urban regeneration (anti-shrinkage) policies and their outcomes. Liverpool is the core city of the Merseyside conurbation. Most of the data presented and discussed in this report is for the core city: Liverpool. However, for comparison the statistical appendix contains data for conurbation (Merseyside) and the United Kingdom. Figure 1. Illustrates the location of the city and the administrative boundaries within the conurbation.

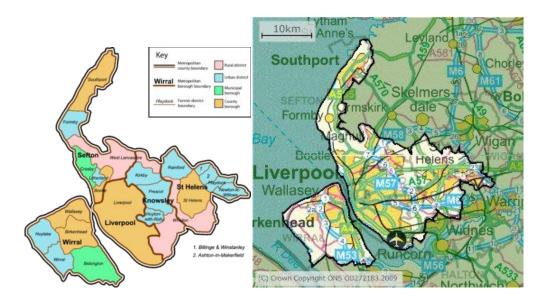


Figure 1. Liverpool and the administrative boundaries of the conurbation.

The population of Liverpool reached its peak in the 1930s with 855,000 people being recorded in the 1931 census. Since that time the city has seen its population virtually halved to its current level of around 435,000. Fundamentally there are two underlying causes for this change: firstly natural change (the difference between births and deaths) and secondly net migration (the difference between inward and outward movements of people). Looking across the period since 1971, the pattern of natural change in Liverpool has varied considerably, with a period of decline in the 1970s, followed by a long period of growth from the mid-1980s to the late 1990s, s short dip and then a return to natural growth after 2003. Migration of the other hand was consistently negative until the late 1990s. This migration trends appears to be driven by two major factors: decline in the number of jobs available in the conurbation leading to a continuous out-migration of people to other parts of the country and beyond in search of work; and secondly, dispersal of the remaining population away from the urban core of the conurbation through a process of suburbanisation and urban sprawl towards the periphery of the conurbation. These trends are explored in depth later in the paper.

2.1. Reasons and processes.

2.1.1. The basic economic sector supporting the original growth of the city was the port. The origins of the port can be found in the growth of colonial trade and the symbiotic relationship between Liverpool and the growing industrial towns of Lancashire and Cheshire from the mid 18th century. A century later virtually the whole of the dock system was complete. Complementing the docks were shipping offices, brokers and all manner of related industrial and commercial activities. Such massive infrastructure investment stimulated yet further growth in trade. By the latter half of the 19th century the good fortunes of the port had turned Liverpool into

a prosperous and thriving metropolis. The trappings of this wealth could be seen in the scale of the docks themselves, the opulence of the commercial buildings that housed the shipping companies, commodity exchanges, banking houses and insurance companies that grew up alongside the shipping trade (see figure 2).



Figure 2. The Pier Head, Liverpool

2.1.2. Large sums were also being spent on civic buildings, public works, parks and gardens. The middle classes built themselves grand terraces and mansions, firstly in the Georgian and early Victorian terraces and squares around Rodney Street, Canning Street and Abercrombie Square and later in more distant suburbs such as Toxteth, Princes Park and Sefton Park. Only the working classes remained relatively unrewarded in an inequitable distribution of trading profits. For them Liverpool was frequently a city of casual and poorly paid work, slum housing and bad health.

2.1.3. The first signs of decline in the fortunes of the city were evident from the beginning of the 20th century, although somewhat masked by the key role played by the port in both world wars. By the end of the 1960s deep-sea passenger liners had deserted the port completely, leaving only cross-river traffic and ferry services to Ireland and the Isle of Man. With the growing importance of European trade, Liverpool found itself on the wrong side of the country and increasingly uncompetitive against the ports of south-east England: from Southampton to Felixstowe. Between 1966 and 1979 Liverpool's share of UK short-sea trade with Europe fell from 6.1 per cent to 2.4 per cent and its share of deep-sea trade fell from 24.5 per cent to 13.8 percent (Gilman S and Burn S, 1982, table 3.1). Technological change also had a major impact. During the 1960s and early 1970s new methods of cargo handling were introduced. Containerisation combined with the trend towards larger vessels, the effect was to increase speed of cargo handling and reduce the demand for wharfs, especially in the older, small upstream docks

south of the Pier Head. Throughput per berth rose from 50,000 tonnes per annum, to between 400,000 and 1,500,000 tonnes per annum. Demand for dock labour reduced rapidly. By 1980 the number of dockworkers had fallen from its 1920 high of around 20,000 to little more than 4,000 (out of a total of over 600,000 jobs in Merseyside as a whole). Docks were becoming abandoned and vast areas laid to waste. In the South Docks alone there were some 90 hectares of derelict land. Liverpool had been the headquarters location of several major companies but by the 1970s many had moved elsewhere, notably to London (e.g. Martins Bank, Cunard). Although there has been a significant recovery in trade through the port in more recent years, in terms of employment the docks now remain marginal to the economy of the city.

- 2.1.4. Alongside the decline of employment in the port and port-related industry and commerce, de-industrialisation brought about by reductions in demand for traditional products and intensifying competition from elsewhere has eliminated much of the industrial base, employment and social stability that existed in the sixties. Competition from other regional centres such as Chester and Warrington and the development of 'out-of-town' shopping and leisure facilities reduced the relative importance of Liverpool City Centre in the retail and cultural life of the region. The image of the city was no longer that of a thriving cosmopolitan port but of a place struggling to come to terms with its reduced importance and its poverty. In the competition for new investment the city has been less successful than some of its competitors. Manchester has become the dominant regional office centre in the North West, aided by its more central location, its international airport and other agglomeration economies. Smaller towns and suburban centres in the region have also benefited more than Liverpool from the growth of small and medium sized firms and the new high technology industries. Nevertheless, Liverpool has not been without its successes in economic development. Culture and tourism, higher education, health and public services have all become important features of the local economy. Some sectors of manufacturing such as motor vehicles, chemicals and pharmaceuticals have also remained important in the wider Merseyside economy.
- 2.1.5. Even in the sixties, the main economic problems were seen as a lack of growth industry, skill shortages, employment failing to keep pace with population growth and inefficiencies in the transport system. Nationally there was already in place a powerful set of regional economic development policies. For much of the post-war period the city and much of the conurbation had benefited from Development Area status and firms had received various forms of subsidy to encourage them to invest in the area. Writing in 1970, Lloyd concluded that during what he termed the 'motor industry phase 1960-7', the impressive growth of vehicle manufacturing, engineering and electrical goods contrasted sharply with the relative decline evident elsewhere (e.g. in shipbuilding, chemicals, textiles, food, drink and tobacco sectors) (Lloyd P E, 1970, p402). In that period some 26,000 new jobs were created in three new manufacturing plants (notably at Halewood and Ellesmere Port). Unfortunately the location of the new job opportunities was not particularly accessible to those being made redundant in the port and inner industrial zones. Most of this new industrial investment was to be found in a peripheral arc running from Kirkby in the north,

through Halewood and across the Mersey to Runcorn and Ellesmere Port, whilst decline was concentrated in the inner urban areas.

- 2.1.6. By the 1970s there was a substantial amount of vacant and derelict land within the inner areas. Port facilities were being rationalised with the abandonment of many older, smaller docks. The emergence of natural gas led to the closure of many 'town' gas works. Older, urban, coal-fired electricity power stations were being replaced by modern, out of town, oil, coal or nuclear power stations. Falling rail traffic and new forms of freight handling led to the closure of many railway lines, stations and goods yards. Structural and technological changes in industrial production forced many inner city manufacturing firms to close or relocate elsewhere. The abandonment of overambitious urban renewal and urban motorway proposals also created large swathes of vacant land in some areas. Through the second half of the decade unemployment in Merseyside doubled so that by June 1979 some 82,000 people (1 in 8 of the workforce) were out of work (Merseyside County Council, 1979, p14). Whilst nationally the decline in manufacturing employment was being offset by growth in the service sector, this was not the case in Liverpool. In part this was because as a port Liverpool already had a sizeable workforce employed in insurance, banking and shipping offices, so that with declining trade, increasing productivity and centralisation of some higher order service functions to Manchester and London, Liverpool lost, rather than gained jobs in many sectors.
- 2.1.7. Later, consultants Wilson and Womersley were to comment that the changing structure of local employment had been matched by locational change with substantial losses in the inner areas of the city and gains mainly to be found on the periphery: to the east in Knowsley, St Helens and Halton and to the south in Wirral and Ellesmere Port. In their view firms had left Liverpool because of a lack of room for expansion on existing sites and the economic uncertainties of operating in the inner areas. Peripheral locations offered better availability of premises and land and good accessibility to the motorway network. Even the Government's own development agency, the English Industrial Estates Corporation (EIEC) (subsequently part of English Partnerships) had concentrated its investment on green field sites.
- 2.1.8. Through the period from the mid-1950s until the mid-1970s slum clearance reduced the density of housing in the inner core and required the building of 'overspill' social housing estates on the periphery of the conurbation. In 1966 the City Council had agreed to a massive clearance programme under which 36% of the city's housing stock (70% of the dwellings in the inner areas) were to be demolished (Couch, 2003, p62). The neighbourhoods particularly affected by slum clearance include Vauxhall and Everton to the north of the city centre and Toxteth and the Dingle to the south. Social housing was being provided on overspill estates from Kirkby to Halewood. There were 'expanded town' agreements with Widnes, Winsford and Ellesmere Port and 'new towns' being developed at Skelmersdale, Runcorn and later, at Warrington. All of which was leading to urban sprawl and population loss from the core city on a massive scale. At the same time speculative private housing development was fuelling suburbanisation northwest along the Mersey coast towards Formby and Ainsdale,

northwards towards Maghull and Ormskirk, eastwards towards St Helens and Warrington and southwards across the Mersey into the Wirral and even as far as North Wales. By the mid-1970s housing policy had changed. The rate of slum clearance and the building of peripheral social housing slowed considerably as a new policy of area improvement and housing refurbishment kept more of the inner urban population in their own homes. By the end of the 1970s the development of social housing in the new and expanded towns had virtually ceased. Although the building of suburban private housing for owner occupation continued the rate of expansion gradually declined as ever-stricter controls on peripheral housebuilding were brought in through the 1980s and 1990s and developers received incentives to develop brownfield sites in the inner urban areas. A generalised picture of the location of expansion, investment and disinvestment over the period is shown in figure 3 below.

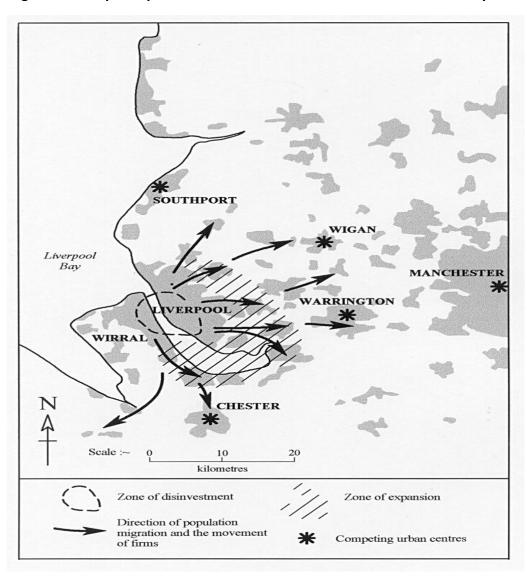


Figure 3. The spatial pattern of disinvestment and investment in Merseyside.

2.1.9. The Government became persuaded that the main causes of inner city deprivation were economic and structural rather than social and local in origin. This

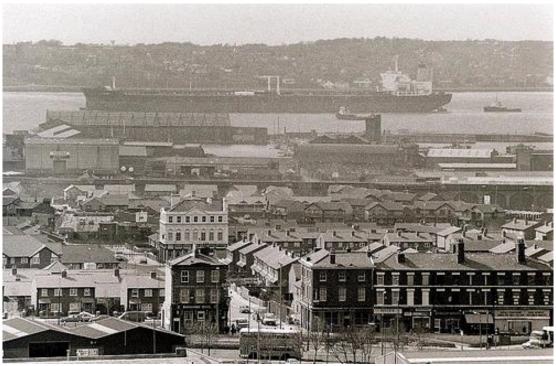
view was translated into policy in the Inner Urban Areas Act 1978 and related policy changes. Partnerships were to be established between central and local government to tackle to worst areas of urban deprivation. At a local level this new approach was articulated by Merseyside County Council whose strategy proposed to:

"Concentrate investment and development within the urban county and particularly in those areas with the most acute problems, enhancing the environment and encouraging housing and economic expansion on derelict and disused sites. It would restrict development on the edge of the built-up areas to a minimum. There would be a reciprocal effort to enhance and conserve the natural features of the county's open land and its agriculture while ensuring that its capacity to meet the county's needs for leisure, recreation and informal education is exploited" (Merseyside County Council, 1975, p8, quoted in Couch, 2003).

- 2.1.10. With the arrival of a new Conservative Government in 1979 (led by Margaret Thatcher) national policies changed. Whilst the importance of regenerating the economy of inner urban areas was accepted, the approach (using local authorities as partners) was not. The new government established urban development corporations (including the Merseyside Development Corporation): central government agencies with powers and resources to reclaim large swathes of urban dereliction and return them to beneficial economic uses.
- 2.1.11. Merseyside Development Corporation (MDC) was designated in 1981 within an area of 350 hectares comprising the former Liverpool South Docks, parts of the north docks and land on the Wirral side of the Mersey. Despite some questions over its accountability and responsiveness to local concerns, the MDC made a significant contribution to the regeneration of the city. The Albert Dock complex opened to visitors in 1984 and became home to the Merseyside Maritime Museum, the Tate Gallery, the Museum of Liverpool Life, a hotel, offices, luxury flats, shopping, bars and restaurants. Subsequently virtually all of the South Docks have been redeveloped with housing, offices, hotels, arena and conference centre, workshops, showrooms and a marina.
- 2.1.12. By the beginning of the 1990s there was a growing acceptance that local authorities had become increasingly marginalised in the regeneration process and that they had a key potential role as facilitators and coordinators of development. The first response of the Government was to introduce City Challenge: a programme that allowed local authorities to lead local partnerships in bidding for central government money to support regeneration projects. Liverpool was amongst the successful cities in the first round of bidding, winning £37.5m to support a regeneration package for the 'City Centre East'. The programme set out a vision of "physical regeneration, people, enterprise and growth sectors and effective and sustained management" (Liverpool City Challenge, 1991, p6). The vision was followed by a wide-ranging list of proposals: enhancing the local physical environment and public realm; restoring a number of redundant buildings to beneficial use; provision of additional housing, especially student accommodation; increased employment opportunities and support for the development of small businesses. By the millennium most of the proposed investments had been achieved and considerable additional private sector funding had been levered in.

- 2.1.13. Government regeneration policies for England were rationalised in 1993 when some twenty one different funding streams were replaced by a 'Single Regeneration Budget' (SRB). In collaboration with a range of local community and commercial organisations, Liverpool City Council made a number of successful bids for SRB funding. One typical example is the North Liverpool Partnership which included three districts within Liverpool's inner city: Breckfield, a predominantly residential area of private 'bylaw' terraces and council housing. Everton, dominated by multi-storey council flats built to replace slums cleared in the 1950s and 1960s; and Vauxhall (See figure 4.).
- 2.1.14. In this run-down area of social deprivation and depressed environment the North Liverpool Partnership was awarded £21.9m SRB funding to: 'create, through effective partnership and the utilisation of the full potential of the whole community, a thriving area whose population enjoy good quality employment, education, health, housing and environment'. According to the Partnership's strategy document the problems of the area were manifold. Educational attainment and aspirations were low, truancy and exclusions commonplace. Youth and long-term unemployment were endemic. There was seen to be a need for very personalised forms of basic skills training. Small local firms needed better access to sources of capital, business contracts and marketing in order to expand. Much of the housing stock was of poor quality and fear of crime was a major issue. Through this six-year strategy it was intended that the SRB funding would be complemented by other public sector funds including £36m from the Liverpool Housing Action Trust (see below), £16m through the Housing Corporation, £12m European Union funding, £2.9m from the City Council, and £2.5m from English Partnerships (NWDA). It was estimated that the total investment in the area over the six years would be in the order of £138m by the end of the programme in 2002/3.





- 2.1.15.. The idea of Housing Action Trusts (HAT) emerged in the 1988 Housing Act as a mechanism for tackling the emerging over-supply of obsolete social housing through renovating and selective demolition. Unlike other Housing Action Trusts, which were area-based renovation programmes on particular run-down council housing estates, the Liverpool Housing Action Trust (LHAT) was unusually based upon a particular housing type: high-rise blocks, scattered across the city. It took over responsibility for 67 of the city's 71 multi-storey blocks of flats, a total of 5337 dwellings. Of these 44 blocks were demolished and only a small number refurbished. Around 900 replacement dwellings were built mainly low rise accommodation for the elderly.
- 2.1.16. In 1993 Merseyside was designated an Objective One region for EU funding on the basis that it was an under-performing region with a gross domestic product (the amount of economic activity) per head of population being less than 75 per cent of the EU average. A programme for economic regeneration was contained within a 'single programming document' drawn up under the auspices of the Government Office for Merseyside and was known as Merseyside 2000. The vision of this programme was to establish Merseyside as a prosperous European City Region with a diverse economic base (European Commission, 1994, p25). The need to develop new technology industries was recognised. It was also significant that the cultural, media and leisure sectors were identified for their importance to the regional economy, including the concentration of museums and galleries in central Liverpool, and the rapidly growing tourism industry. A special feature of the area identified by the programme was the sharp degree of social and economic disparities in the region. This was particularly relevant to the fifth driver, action for people, where there was to be a spatial focus on areas worst affected by long-term unemployment and low incomes (European Commission, 1994, Ch5).
- 2.1.17. By the millennium there was a perceptible increase in investments in the city centre, deprived urban neighbourhoods and the economic regeneration areas such as the Eastern Corridor, Waterfront, Gillmoss/Fazakerley/Aintree and Speke/Garston. Nevertheless, the local economy continued to under-perform relative to the EU average and Merseyside was designated to receive a second tranch of Objective One funding between 2000 and 2006. The analysis of local economic circumstances remained similar to that which had been presented six years earlier. The vision, however, had changed to one of achieving 'a world class city-region that attracts people to live work, invest and visit' (European Commission, 2000). This was a significant change. It emphasised the importance of Liverpool and especially Liverpool city centre, in the economy of the region. In so doing it also recognised the importance of service industries, including consumption activities such as shopping, recreation, culture and tourism, to the economy of modern city regions. This was a much more advanced programme that which has been approved in 1994, reflecting the modern role of city-regions and more in tune with contemporary urban policies across Europe.
- 2.1.18. Following the return of the 'New' Labour Government in 1997, urban regeneration policy has been subject to considerable review and has been further modified. Urban policy has been strongly influenced by the report *Towards an Urban Renaissance*, produced by the Urban Taskforce chaired by Lord Richard Rogers (1999). A key initiative was the establishment of urban regeneration companies,

intended to be single purpose development agencies responsible for leading and coordinating the regeneration of specific areas. One such company, Liverpool Vision, was established in Liverpool City Centre – though its remit is now city-wide. Liverpool Vision is a not-for-profit limited company charged with preparing and implementing proposals for the regeneration of Liverpool city centre and the major economic development zones in other parts of the city. The company has been instrumental in supporting a number of major regeneration projects including: Liverpool One (a new £1 billion extension to the retail core; the new Kings Dock arena and convention centre and the remodelling of the historic Pier Head area.

- 2.1.19. Regarding neighbourhood renewal, an early policy introduced by the Labour Government was the 'New Deal for Communities' which identified a number of inner urban areas across the country that were losing population, suffering poor job prospects, high levels of crime, educational under-attainment, poor housing and health. In these shrinking neighbourhoods the idea was to provide a focussed, 10-year programme of regeneration for the most deprived areas. Kensington in Liverpool was one area to receive NDC funding (£61m) where the goal was said to be to reduce the gaps, in terms of deprivation and inequality, between Kensington and the rest of the country.
- 2.1.20. Around the millennium a new problem emerged. The government argued that although unpopular housing has been with us for years, low demand leading to market failure was a new problem, acknowledged in the late 1990s. They claimed it affected 1 million homes and threatened to undermine the renaissance now being experienced in some urban centres (See Mumford and Power, 1999). Housing market renewal 'Pathfinder' projects (HMR) have been established to tackle the most acute areas of low demand and abandonment in parts of the North and Midlands. Pathfinders decide how to spend their money in consultation with their communities. The approach includes working in partnerships including Local Authorities and other key stakeholders to develop strategic plans for whole housing markets (ODPM, 2003).
- 2.1.21. Liverpool benefits from the Merseyside 'New Heartlands' HMR programme. This long term programme of refurbishment, re-development and improved management is intended to help local communities to live in decent, desirable homes in attractive, healthier places. Liverpool received £56.5 million HMR funding for 2006-2008 to continue with the planned regeneration. Further funding has also been secured, meaning that by the end of 2008, a total of over £300million will have been invested in the area. Kensington is the city's largest HMR area, covering 5,531 properties, including numerous buildings of architectural merit, as well as a large Victorian park and gardens. Property type, size and density vary across Kensington, with the worst housing conditions being found in the Edge Hill neighbourhood. The plan for Kensington includes the demolition of approximately 900 houses, predominantly within the Edge Hill neighbourhood. New homes with gardens and parking facilities will be built by Bellway Homes, the lead developer, with 400 proposed on the cleared site. Many of the remaining properties will receive physical improvements. However, it must be said that this programme is highly contested with a number of groups questioning the process and the motives behind the policy (Allen, 2008).
- 2.1.22. Looking at the experience of Liverpool over the decades, we can see how economic restructuring and a declining number of jobs led to a loss of population

from the conurbation (Merseyside), particularly during the 1970s and 1980s. The problem of population loss was exacerbated by a continuing dispersal or suburbanisation process that both social and private housing developments constructed at the periphery of the conurbation. At the beginning of the 1980s the local authorities (Merseyside County Council) developed a strategic policy of urban regeneration complemented by restraints on development at the periphery. Central government sponsored investments in the reuse of derelict urban land and buildings supported this approach. Gradually the rate of shrinkage began to slow. During the 1990s urban regeneration policies continued under various guises. Between 1993 and 2006 the Merseyside benefitted from EU Objective One funding which alongside the trickle-down effects of national economic growth, generated new investment in the infrastructure of the city. By the 2000s the success of this long-run of spending on urban regeneration combined with ever more severe restrictions on peripheral growth could be seen as the rate of shrinkage nearer zero.

2.2. Trajectories of urban shrinkage

Please note that the majority of data is presented for three spatial areas: 1. Liverpool – the core city of the Liverpool conurbation; 2. Merseyside – the Liverpool conurbation; 3. The United Kingdom. Wherever possible data is presented in a time series from 1971 until the most recently available date. The source data for all charts is given in the appendix.

Gross Domestic Product.

2.2.1. Gross domestic product (GDP) is a measure of the value of economic production of a given area. GDP per capita provides a method of standardising data between areas of different sizes in order to make comparisons about the relative economic contribution. It is often used (inaccurately) as an indicator of the standard of living. Whilst data on GDP has been provided for many years, it is only possible to provide consistent, reliable and comparable data at the three scales of analysis that interest us here (country, conurbation, core city) since 1995. Thus, unfortunately, this does not capture the period when the Liverpool was most rapidly shrinking. However, what can be seen in figure 5. is that there is little relationship between GDP per capita and population change. GDP per capita in the core city of Liverpool is consistently higher than that for the conurbation (Merseyside) yet population in Liverpool has been declining faster than that of the conurbation as a whole. It can also been seen that GDP per capita is rising faster and diverging from that of the conurbation. The explanation probably lies in the fact that in the type of work that takes place in central Liverpool (financial services, public administration, higher education, health services, etc.) the value added per capita is relatively high, whereas in the rest of the conurbation, containing much of the remaining manufacturing industry for example, there is a lower level of value added per capita. The reason for the emerging divergence is the shift from an industrial to a post-industrial economy with its spatial concentration of high value job growth in the core city. It may also be the case that some of this GDP may have been generated by in commuters.

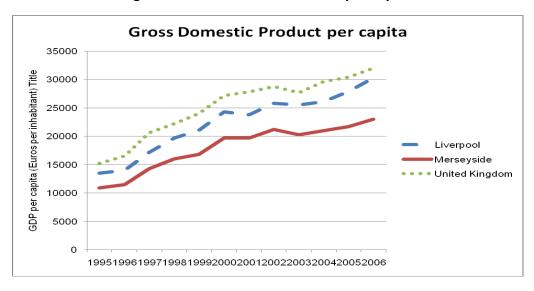


Figure 5. Gross Domestic Product per capita

Economic change, employment and unemployment

2.2.2 Figure 6, below, shows the changing economic structure of the core city. The decline in manufacturing employment is very evident. Thus, whilst the total number of jobs has declined from 250,000 in 1971 to 145,500 in 2001, the proportion within the Services sector has increased from 44.5% to 73.6%.

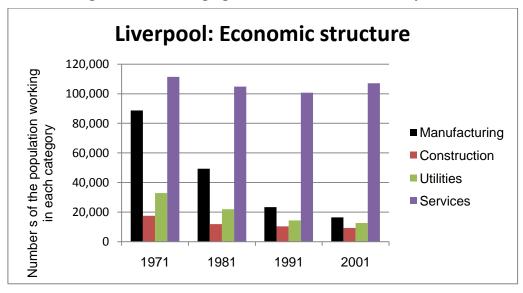
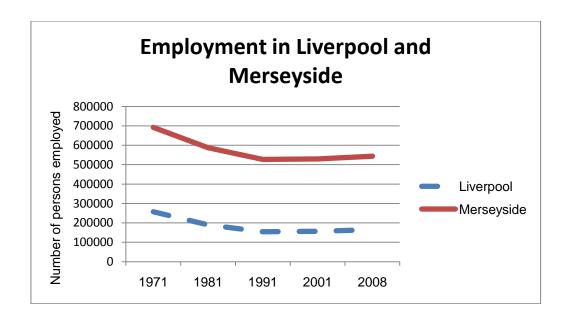


Figure 6. The changing economic structure of Liverpool.

Source: Liverpool Historical Data (Vision of Britain, 2009)

Figure 7. Employment in Liverpool and Merseyside



- 2.2.3. Figure 7. provides some data about the employment trends within the conurbation population. It will be seen that the number of people living in the conurbation who were employed declined from 692,000 in 1971 to 527,000 in 1991 (a 24% fall). It is this loss of employment that explains the second population trend: the outward migration from the conurbation as a whole, in search of work elsewhere in the country and beyond. However, it will be seen that since 1991 there has been an upturn in the number of jobs both in the conurbation and in the core city. Between 1991 and 2008 employment within the population of the conurbation increased by 3.1% but employment within the population of the core city increased by 6.9%, thus confirming the emerging trends towards centralisation and reurbanisation mentioned above. Nationally employment increased by around 8.0% over the period 1991-2008 (ONS, 2008).
- 2.2.4. These employment changes are reflected in changing unemployment rates as indicated below.

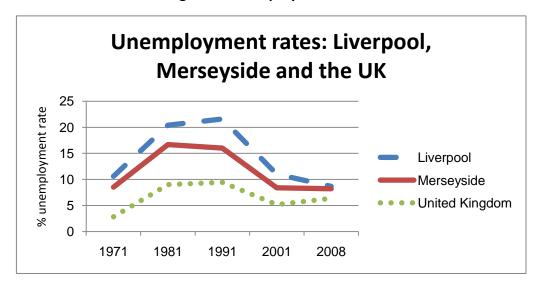


Figure 8. Unemployment rates.

- 2.2.5. Consistant with the explanation of population trends given below it can be seen that unemployment rates in Liverpool: a) rose sharply from 1971 to 1981 and diverged from the national and conurbation trend as the recession got deeper and many local jobs were lost. Between 1981 and 1991 the situation in the core city continued to worsen whilst there was some slight improvement in the conurbation as a whole. Since 1991 there has been a rapid fall in unemployment rates both nationally and locally. One notable feature it that unemployment rates in the core city of Liverpool have been rapidly converging towards the national average. Furthermore, the fall in unemployment has been faster in the core city than in conurbation as a whole. This again confirms the notion of reurbanisation indentified earlier.
- 2.2.6. There has also been an improving situation regarding the long-term unemployed. Here, consistent comparable data is only available for the period since 1994 so unfortunately the period of most rapid shrinkage is not covered. Nevertheless, figure 9. shows a steady decline in the proportion of the unemployed who are long-term unemployed. This trend is consistent across all spatial scales. It will be noted that the impact of the recent recession is not yet apparent.

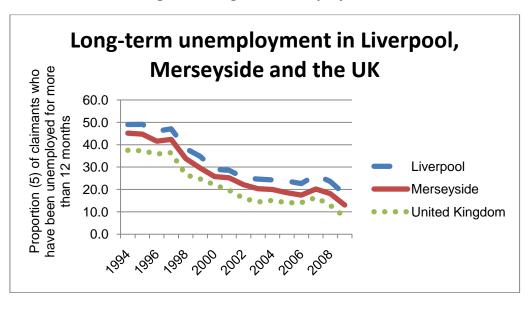


Figure 9. Long-term unemployment.

2.2.7. Dependency is another factor of concern to policy makers. This is the ratio of the economically inactive population to the active population. i.e. how many people are dependent upon each worker for support. Some data is included in the appendix but has not been brought into the main report as there is little discernable trend. Furthermore this data is of only limited value for a couple of reasons. Firstly the ratio itself is partly the outcome of certain social policy decisions made by society in general, for example school leaving age and retirement age. Secondly dependency ratios have little meaning at any scale other than the whole national economy. E.g. the fact that many towns on the south coast of England have very high dependency ratios because they are favoured locations for retirement does not of itself mean that these places are poorer than elsewhere. Demonstrably this is not the case.

Population change

2.2.8. The total population of both the core city of Liverpool and the Merseyside conurbation have continued to decline throughout the study period. However, as can be seen in figures 10 and 11 below, the rate of decline is slackening and the core city is on the cusp of reurbanisation.

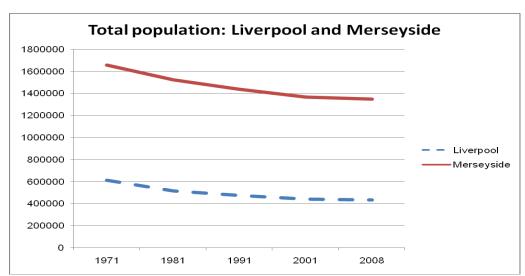
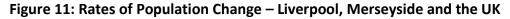
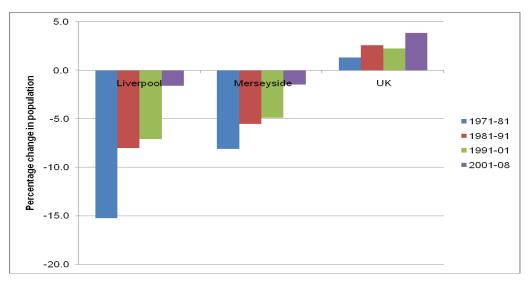


Figure 10. Total population in Liverpool and Merseyside





2.2.9. In the trend of shrinkage followed by reurbanisation, Liverpool is following but lagging behind other similar cities within the UK, as shown in figure 12 below.

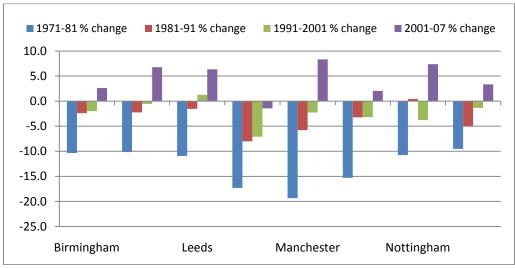


Figure 12. Population change in selected UK cities.

Source: Couch, Fowles & Karecha, 2009

2.2.10. The population of Liverpool has been shrinking throughout the period since 1951. Both the core city of Liverpool and the conurbation have been in continuous decline. There are two components of population change: natural change and migration. These are not independent from each other. Those who migrate tend to be younger and better skilled. They leave behind a residual population that is ageing and generally less skilled. This increase in average age combined with other factors such and household structure has the effect of reducing crude fertility rates causing further shrinkage of the population. These components of change are shown in figure 13a. below.

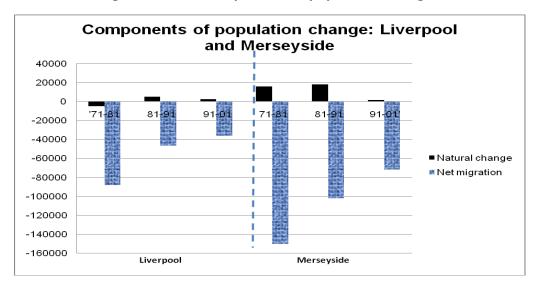


Figure 13a. The components of population change.

2.2.11. The different trends in the core city can be contrasted with those of the conurbation as a whole. In the first two decades net out-migration from the core city is relatively high but slows towards the end of the period as housing-led migration reduces and there are improvements in the local economy. In contrast, looking at the whole conurbation, which includes the peripheral areas where more families live, natural change

is positive throughout all three decades. On the other hand the levels of net out-migration are consistently high. Both the core city and the conurbation follow the same trends of natural decline in the 1970s followed by a long period of natural growth through the 1980s and early 1990s, then a short period of decline before growing again in the 2000's as a whole, as shown in figure 13b below.

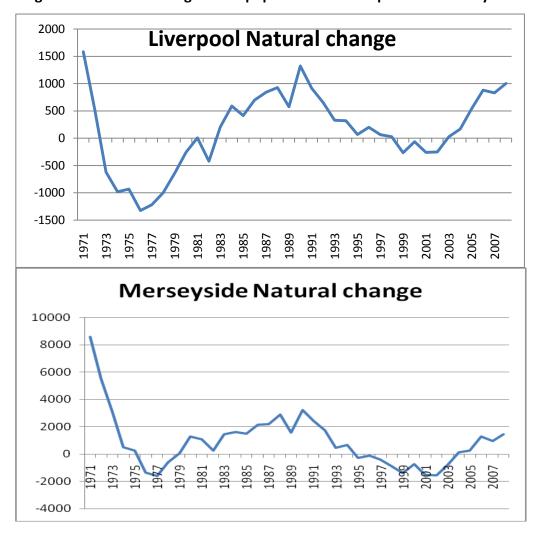


Figure 13b Natural Change in the populations of Liverpool and Merseyside

2.2.12. Looking specifically at out-migration in figure 14, two trends are apparent. There has been a movement of population from the core city to the periphery of the conurbation. This is largely driven by changes in the housing system and the movement of jobs. During the 1950s, 60s and 70s the process of slum clearance and the building of overspill social housing (particularly in the Borough of Knowsley) forcibly moved large numbers of lower income households from the core to the periphery. During the same period rising affluence stimulated a boom in speculative private housebuilding for owner occupation, also almost entirely built at the periphery of the conurbation. Both processes have been brought under ever stronger control since the 1980s and the rate of outward movement has slowed. Similarly, industrial investment in the 1960s created many new jobs at the periphery and fuelled demand for housing in that location. That too changed after the 1980s with structural shifts in the economy towards a more post-industrial,

service-based employment structure, with an increasing proportion of jobs being concentrated in the core city.

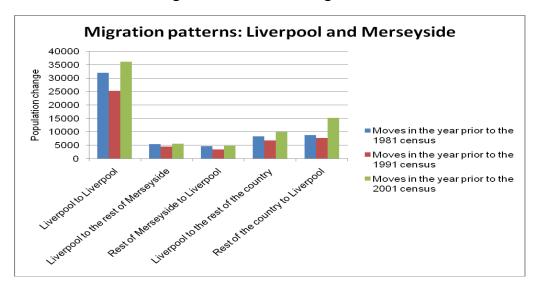


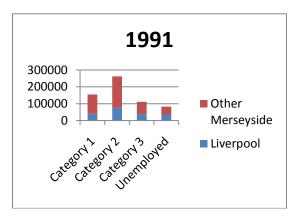
Figure 14. Patterns of migration.

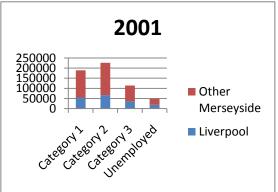
3. IMPACTS AND CONSEQUENCES OF URBAN SHRINKAGE

3.1. Patterns of segregation and social cohesion

- 3.1. Occupational group data gives an indication of the changing social structure in a locality. Figure 15. displays the number of employees working in different occupational categories, as well those unemployed, in Liverpool and the other areas of Merseyside for 1991, 2001 and 2009 (with each bar providing the Merseyside total). Certain occupational groups have been combined into categories for the purpose of analysis. The three category's added to the number of unemployed is equal to the total economically active of working age. The following legend applies to the categories:
 - Category 1 Managers and senior officials; professional occupations and associate professional; technical occupations
 - Category 2 Administrative and secretarial occupations; skilled trades occupations; personal service occupations; sales and customer service occupations
 - Category 3 Process, plant and machine operatives; elementary occupations
- 3.2. The most notable trends displayed by figure 15. are a distinct increase in Category 1 occupations, both in the connurbation and core city, and a decrease in unemployment. Figure 16. then displays the same figures as percentages for Liverpool and the other areas of Merseyside. A distinct change in the proportions of occupational groups can be observed. Whereas in 1991 the proportion of Category 1's in Liverpool was the smallest (around 26%) and unemployment the greatest (around 44%), with a gradual increase through the categories, by 2009 the proportions had all leveled off to around 30% in Liverpool. There has therefore been an increase in the proportion of Category 1's in the core city of the connurbation, and a decrease in the proportion of other categories located in the core. This indicates the existence of gentrification processes over the past 18 years in the core city.

Figure 15. Occupational group numbers, 1991-2009.





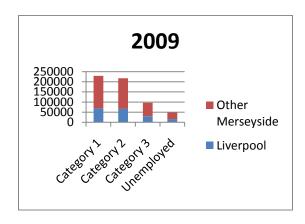
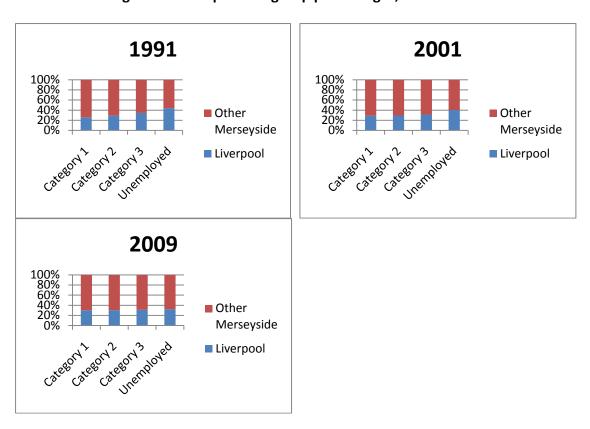


Figure 16. Occupational group percentages, 1991-2009



3.2. Business and employment

3.3. Figure 17. displays the numbers of businesses registered for VAT (value added tax) in Liverpool and other Merseyside areas for 1994, 2000 and 2007 (each bar therefore provides the Merseyside total). This gives an indication of business activity in the area. The figure shows that there has been a slight decrease in the number of wholesale, retail and repairs businesses, a slight increase in construction business and a large increase in real estate, renting and business activities firms. However, figure 18, which shows the same data as figure 17. But in percentages, displays that

the proportion of businesses in the core and wider connurbation has remained roughly the same during the period for all categories of business.

Figure 17. Number of VAT registered businesses, stock at end of year, 1994-2007

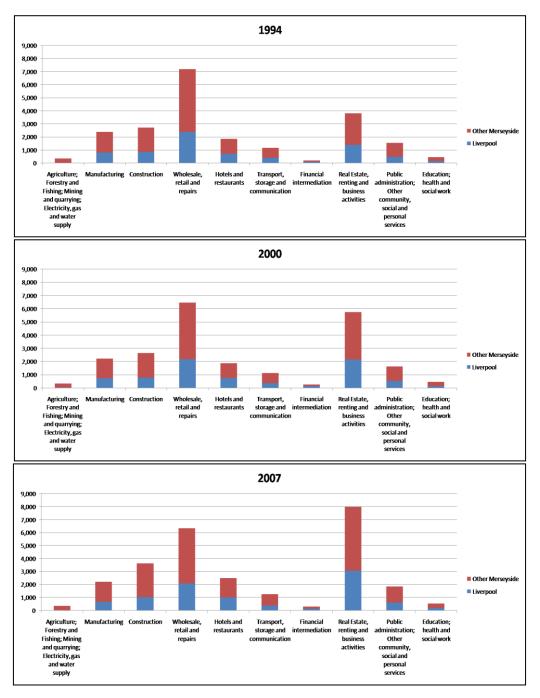
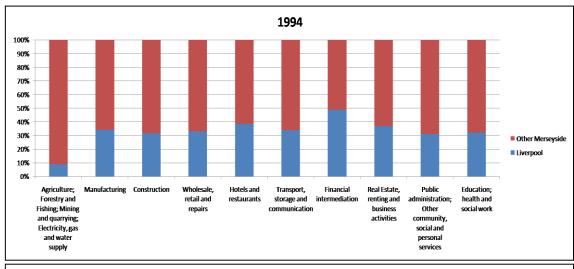
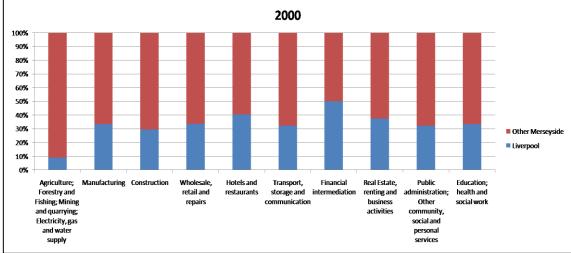
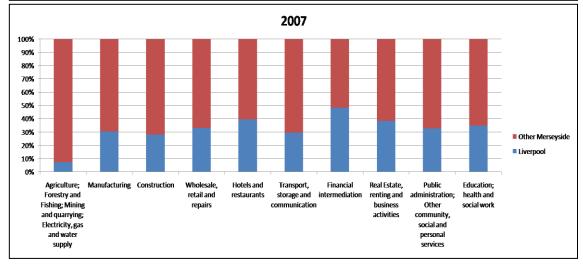


Figure 18. Percentage of VAT registered businesses, stock at end of year, 1994-2007







3.4 Details of employment changes have been given in the previous chapter, and so will not be repeated here.

3.3. Social infrastructure and education

- 3.5. A major impact of urban shrinkage in Liverpool has been a change in the age structure of the population over time. This is important in two regards. Firstly, the changing school populations and demand for school places, and secondly the proportion of elderly persons in the population and their need for social care and health provision. Figure 19. provides an indication of the changing proportion of 5-19 year olds in the population.
- 3.6. At all spatial scales the proportion of 5-19 year olds (school age children) is declining. However in Liverpool, the core city, the effect of this declining proportion, when combined with the declining population, has a dramatic impact on the total number of school age children, as shown in figure 20.

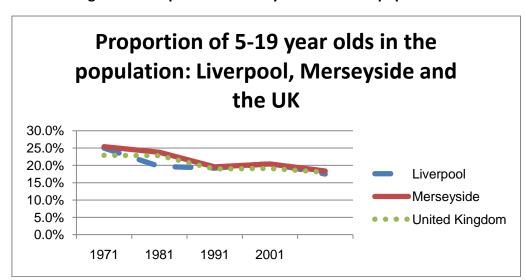
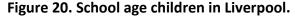
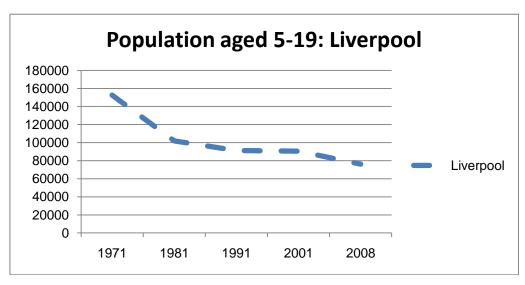


Figure 19. Proportion of 5-19 year olds in the population.





- 3.7. Here one of the biggest impacts of the shrinking city on local services can be seen. The number of children and young people in this age group in Liverpool has approximately halved over the last 4 decades. On several occasions the City Council has engaged in a process of rationalisation and reorganisation in the local schools system. These processes are always politically very controversial and cut right to the heart of local communities. This is one of the service areas where the impact of shrinkage and ageing is most acutely felt by local people especially those with children at school and of course, school children themselves.
- 3.8. However, it must be appreciated that there is no longer a direct relationship between school-age population and the need for school places in any particular locality. Firstly and increasingly since the 1980s parents have been given greater freedom of choice over the school to which they send their children. These choices are influenced by a number of factors: certainly geography and location remain very important factors but the reputation of schools, as indicated by league tables published by the government, is another. The specialism of a secondary school (e.g. arts, sciences) and the provision of faith schools are other considerations. In addition, even in Liverpool, a proportion of pupils attend private schools outside the state system. Thus whilst a declining school age population tends to be associated with declining need for school provision, it is not a precise relationship particularly at the level of the individual school or neighbourhood.
- 3.9. The proportion of elderly people within the population has also increased as shown in figure 17. Although the proportion of very elderly people in the population is increasing in the core city of Liverpool it does not seem to be increasing at quite the rate of the Merseyside conurbation nor the UK national average. This may be because there is unlikely to be much return in-migration by older (post-family) households from the periphery to the core city and also because many people from Liverpool choose to retire to the periphery of the conurbation, notably to the coastal resorts of West Kirby, Hoylake, Crosby, Formby and Southport.

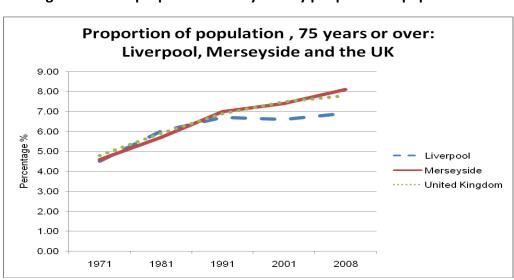


Figure 21. The proportion of very elderly people in the population.

3.10. Nevertheless, the actual number of the very elderly in Liverpool is increasing as shown in figure 22. This rising number of very elderly people does put an increasing burden upon both health and social services within the city.

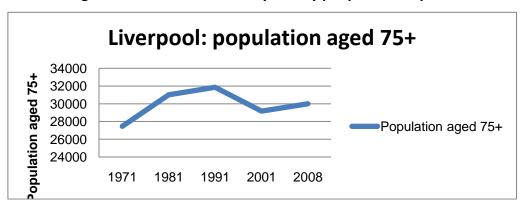


Figure 22. The number of very elderly people in Liverpool.

3.4. Households and housing

3.11. Between 1971 and 2001 the population of Liverpool fell from 610,114 to 441,900 - a decline of over 27.5%. However, the fall in the number of households was less dramatic. Whilst there were 194,465 households in 1971, there were still 187,865 households in 2001, a drop of just 3.4%. The reason was that average household size was also falling as part of a national trend. More young and elderly people were living alone or in childless households while many families were having fewer children. In 1971 there was an average of 3.1 persons per household in Liverpool but by 2001 this had fallen to only 2.4pph. In other words, in 1971 about 323 dwellings were needed to accommodate every 1,000 people in Liverpool but by 2001 the housing stock would have to be expanded to 417 dwellings per 1,000 people to accommodate the same population. Thus the number of households fell at a much slower rate than the population. Figure 23. below shows the relationship between population and household change.

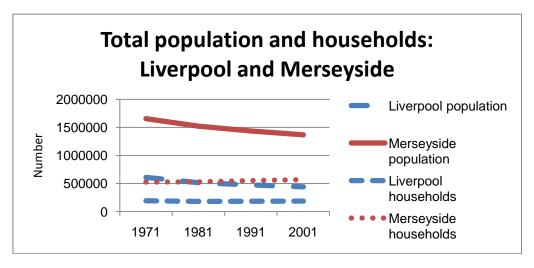


Figure 23. Total population and households.

3.12. Over the same period the number of dwellings in Liverpool increased slightly from 193,210 to 197,824 (+ 2.4%). As a result of these changes the ratio of dwellings to households improved from 0.99 dwellings per household in 1971 to 1.05 dwellings per household in 2001. This is to say, over the three decades the city moved from a crude housing shortage to a crude housing surplus. This change had a number of With a wider choice of accommodation, households were consequences. increasingly able to reject the least popular housing (i.e. dwellings in poor locations, overpriced or of poor quality design, construction, amenities or state of repair). This might have been of benefit to consumers but led to housing providers in all tenures being left with surplus stock that they could not sell or let at any price. It also meant that there was an increasing per capita burden of housing maintenance. In 1971 each member of the population, on average, could theoretically be said to be responsible for the maintenance and repair of 0.32 dwellings, by 2001 this per capita burden was about 0.45 dwellings (i.e. each member of the population carried the burden of maintenance and repair of more than a third more dwelling space in 2001 than in 1971). This would have significant financial implications for any city but in Liverpool other features of population change combined to exacerbate the situation.

3.13. With this emerging housing surplus it would be reasonable to expect housing vacancy rates to rise. Figure 24. has the trend. It will be seen that vacancy rates in the core city have been above the conurbation and national averages throughout the study period, particularly at the time of the 1981 and 1991 censuses, but not excessively so. Given the lost of population it is perhaps surprising that vacancy rates have been contained within reasonable bounds and that more recently they have been declining and converging towards the conurbation and national averages. This is testimony to the quantitative effectiveness of the housing and regeneration policies that have been operating in the city.

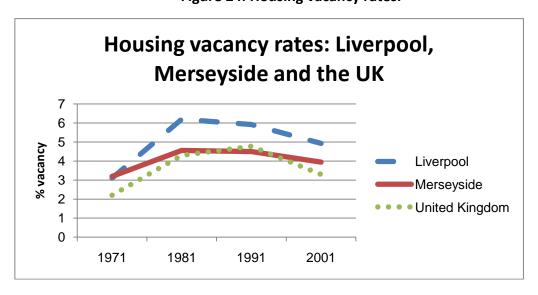


Figure 24. Housing vacancy rates.

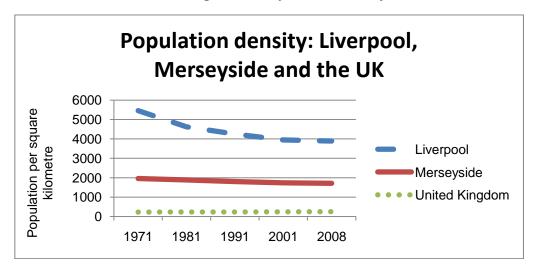


Figure 25. Population density.

[NB: The population density of England is 395/km² – the highest of any large European country.]

3.14. One of the biggest changes in the physical character of Liverpool's residential areas has been a steady fall in population density as shown in figure 25. With a falling population accommodated within the city boundary the overall population density fell from around 5455 persons per Km² in 1971 to around 3890 person per Km² by 2008. At the same time there was an increase in the amount of land and buildings within the city used for residential purposes. The density of population within residential areas therefore declined by an even greater amount. Falling densities made the provision of local community services and commercial activity more difficult to achieve. If, for example, it takes an average population of 5,000 to support a two-form entry primary school, then at the 1971 density such a population would have been accommodated on about 0.92km² of the city; at the 2008 density the population is spread over 1.29km² But between 1971 and 2008 the proportion of children aged 5 to 9 years (the approximate primary school age range) within the population declined from 8.5% to 5.0% so that average catchment area of a primary school would have further increased to around 1.40km². The implication of this is that many children would have to travel further to their primary school, with consequent impacts on the demand for car use, pollution and energy consumption. Commercial activity, such as the provision of local shopping, would also depend upon a local catchment population. Not only did falling densities reduce these local populations in many areas but rising car ownership and the advent of large supermarkets has led to a dramatic reduction in local retail provision.

3.15. Despite the falling number of households, housebuilding within the city and conurbation has remained bouyant. Figure 26. shows recent trends. It will be noted that the proportion of Merseyside housing completions occurring with the core city of Liverpool has increased from around 26% in 2001/2 to around 65% in 2008/9. This is in line with, and shows the effectiveness of Government policies in this regard.

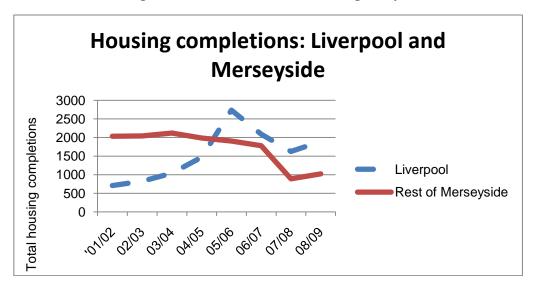


Figure 26. Recent trends in housing completions.

3.16. Within this one significant development has been the rise of city centre living and the building of apartments to meet this need. The emergence of city centre living as a dimension of reurbanisation has been an important trend in recent years. It appears to have resulted from a combination of urban policies and housing market forces pulling in a similar direction over the past 10-15 years. The result has been a shift in the location and type of housing supplied in British cities, much of which has become occupied by a population that is characterised by small adult households with a high level of transcience. In Liverpool the city centre population has increased by more than 17,000 since 1991. It seems likely that much of this increased demand has been stimulated by growth in the higher education sector (student numbers) and the post-industrial nature of recent economic development. Since the millennium housing investment in Liverpool city centre has accelerated beyond all expectations. According to Liverpool City Council, between 1988 and September 2008 nearly 9,000 dwellings were completed in the city centre. To this must be added around 2,000 dwellings under construction in the last quarter of 2008 and a further 5,000 in anticipated schemes. However, as a consequence of the recent downturn in the housing market, there must be serious doubt as to how many of these anticipated schemes will actually come to fruition in their currently proposed form.

3.17. A further indication that the local housing market has been kept in reasonable balance is provided by figure 27. which shows that in the core city in particular and to a lesser extent in the conurbation as a whole, dwelling prices have remained remarkably consistent over the last decade, not varying significantly in their relationship with national average prices.

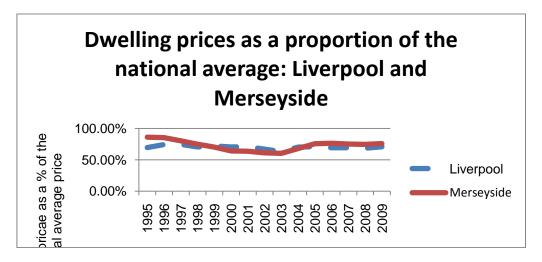


Figure 27. Trends in dwelling prices.

3.5. Technical infrastructure

3.18. Prior to the 1980s, the main utility services in the UK were provided by public corporations. Baldwin and Cave explain the arrangements:

"Telecommunications were provided by the Post Office and after 1981, when telecommunications were separated from postal services, by British Telecom (BT). In the gas industry, British Gas was the virtual sole supplier after 1972. In electricity, the Central Electricity General Board (CEGB) generated and transmitted electricity in England and Wales and twelve regional area boards were responsible for distribution. In water, ten water authorities supplied water and sewerage services in England and Wales after 1973 but, in addition, a number of private statutory water companies provided water." (1999, p. 190)

- 3.19. Through a series of national government Act's during the 1980s and early 1990s the utilities were all privatised. This has led to a complex situation in terms of the distribution and supply of utilities. The spatial areas in which companies operate are also not aligned specifically with UK administrative boundaries. In Merseyside, water and sewerage is supplied and managed by the company United Utilities. Electricity, gas and telecommunications are delivered and supplied by a series of different companies.
- 3.20. Figure 28. displays that numbers of bus journey's in Merseyside has fallen since the mid-1980s. This has been complimented by a rise in rail travel (see figure 29. directly comparable data only available from 1997).

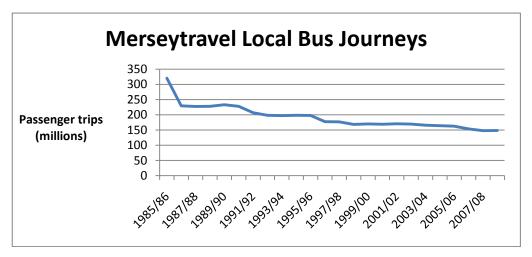
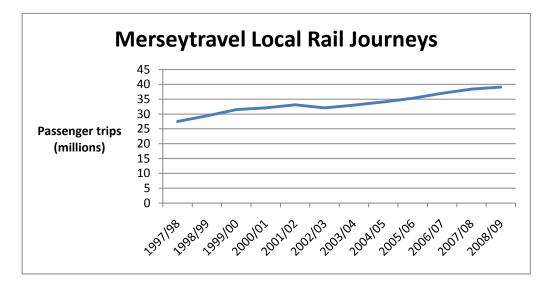


Figure 28. Bus journey numbers, 1985/86-2008/09

Figure 29. Rail journey numbers, 1997/98-2008/09



3.6. Land use and environmental quality

3.21. A consequence of industrial change and restructuring is the emergence of vacant and derelict land, also known as brownfield sites. The appearance of very large areas of derelict land in the heart of many UK cities, including Liverpool, was one of the primary reasons why central government, in the 1980s, became so concerned with property-led urban regeneration. Derelict urban sites were seen as a 'wasted resource' that should be brought back into economic use. Whilst data was gathered at different points in respect of the amount of vacant and derelict land existing and treated within areas, the basis upon which data has been collected, including the very definition of the subject matter, has changed a number of times.

Hence it is not possible to provide any meaningful comparable data on a consistent basis for more than the last few years. Over the last 7 years the amount of brownfield land in Liverpool has averaged around 5% of the total land area of the city. Equivalent figures for Merseyside and the UK are 2.5% and 0.3% respectively. Two points need to be made. Firstly, the amount of brownfield land in Liverpool is today significantly lower than was the case in the 1970s and 1980s. Much of the derelict land from that period (e.g. docklands, former transport and utilities sites and former industrial sites) has been reused. The whole of the former south docks for example (an area of perhaps 4 Km²) is now a thriving area of housing and mixed uses. Secondly, the amount of brownfield land is never static. Brownfield land is constantly being created (although not today in the quantities that was the case three decades ago) and brought back into use. It is Government policy that at least 60% of all new housing should be built on 'previously used urban land'. The actual figure achieved in Liverpool between 2005 and 2008 was 93%.

3.22. In terms of environmental quality in the area during the time period under study, there is little time-series data available to allow comparisons. However, data is available which charts the improvement in water quality of the Mersey river basin since the early 1970s. Figure 30. below displays the reduction in organic load in the river during this time. It can be seen that a significant improvement has occurred. Much of this improvement can be sourced to a partnership established by the national government in the mid-1980s – the Mersey Basin Campaign – which, during its 25 year life-span, worked to facilitating the clean-up of the River Mersey and its tributaries.

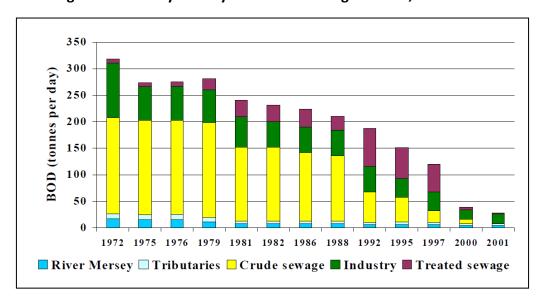


Figure 30. Mersey estuary – reduction in organic load, 1972-2001.

Source: Jones, 2006, p. 7

3.7. Municipal finances and budget

- 3.23. The structure of local governance and local government in England varies considerably from place to place. This makes comparisons of municipal budgets extremely complex. In an international comparative context such comparisons become virtually meaningless. The structure of local governance in Liverpool is as follows. Liverpool City Council is a unitary authority. i.e. there is no other elected tier of government between the City Council and the central government in England. Furthermore, as a metropolitan borough neither is there any tier of elected government below the level of the City Council.
- 3.24. Liverpool City Council is responsible for the following local services:
 - Economic development and urban regeneration policy
 - Town planning and building control
 - Housing policy
 - Environmental health
 - Highways and street cleanliness
 - Waste management
 - Education
 - Social services
 - Libraries and information services
 - Sports and recreation facilities
 - Registry services
- 3.25. Liverpool City Council is NOT responsible for the following local services:
 - Police and emergency services (Merseyside Police, Fire and Ambulance services)
 - Public transport (Merseytravel [policy]; various private companies [delivery])
 - Water supply and sewage disposal (United Utilites privatised utility)
 - Strategic environmental protection (Environment Agency)
 - Energy supply (privatised utilities)
 - Telecommunications (privatised utilities)
 - Primary health care (Primary Care Trusts)
 - Secondary health care [hospitals] (Hospital Trusts)
 - Museums and galleries (National Museums and Galleries on Merseyside)
- 3.26. A Local Strategic Partnership (LSP Liverpool First) has responsibility for bringing some coordination to the policy direction and delivery of services amongst all these agencies and services within the locality.
- 3.27. Whilst it is not possible to give meaningful time-series comparisons of the local municipal budget, figure 31. gives an indication of the situation in 2008/9.

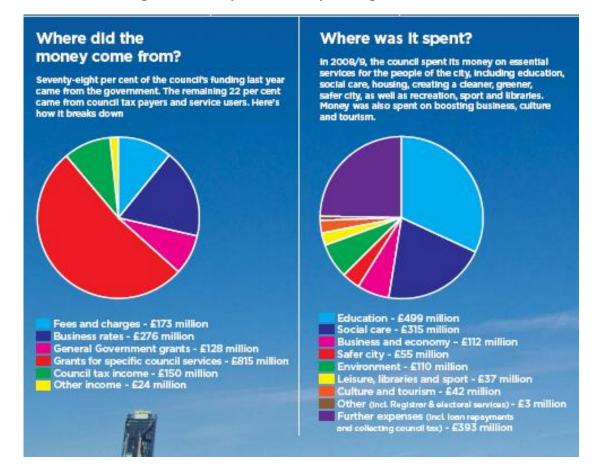


Figure 31. Liverpool's municipal budget for 2008/9.

3.8. Everton and Granby – two shrinking neighbourhoods in the inner core

- 3.28. Everton and Granby are two inner city wards¹ (neighbourhoods) with contrasting chacteristics and different experiences of urban change. The comparison of these two areas offers some interesting insights into the contrasting dynamics of population decline in different inner urban neighbourhoods.
- 3.29. The majority of neighbourhood areas in Everton lie to the north of the city centre about 1 kilometre inland from the River Mersey (see figure 25 below). The ward developed in the 19th century mainly with high density housing occupied by the working classes. Much of this mainly private rented terraced housing was removed in the slum clearance programmes of the 1960s and early 1970s and replaced with social rented housing, much of it in the form of multi-storey blocks. For a number of reasons the economic life of many of these blocks was foreshortened by a combination of poor design and construction, poor maintenance and management, and falling demand. As a consequence the majority of such blocks were removed in the 1990s and replaced by low-rise mixed tenure single family homes. These two waves of redevelopment were very

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¹ A ward is the constituency area of a local councillor.

influential in reducing the population density and changing the population structure of the neighbourhood. Everton has 'benefitted' from a number of urban regeneration policy initiatives, including 1980s Housing Renewal Area, 1990s North Liverpool Partnership and Neighbourhood Renewal funding in the 2000s.

3.30. Granby lies to the south of the city centre (see figure 32. below). The area contains a mixture of housing types. Whilst there is a lot of 19th century working class terraced housing, there are quite a number of larger Victorian 'villas' built for middle class occupation. By the 1950s the middle classes had moved on and many of these villas had been subdivided for working class occupation. Today there are signs of gentrification, especially around Princes Boulvard - a major routeway cutting through the middle of the area. Granby has also been a traditional first destination for in-migrants. In consequence it has tended to have a more transcient population than Everton, with many students and young workers. Although parts of Granby were affected by slum clearance this was less the case than in Everton. In the 1970s and 1980s Granby benefitted from some vigorous housing refurbishment and area improvement programmes. The character of Granby was first described in a 1972 Shelter Neighbourhood Action Project (SNAP) report (Shelter, 1972), and has been the subject of numerous subsequent regeneration policies. Selected data from the two wards will now be presented to illustrate the causes of shrinkage in Everton and Granby and its effects.

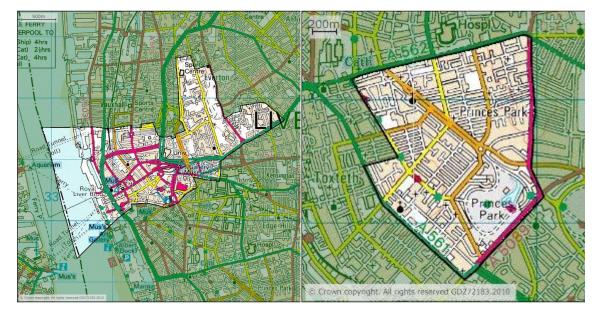


Figure 32. Everton and Granby

3.31. Figure 33. below shows that, overall, the populations of both wards declined at similar rates between 1971 and 2001. More specifically, both wards declined at a broadly similar rate between 1971 and 81, but between 1981 and 91 Everton declined at a much higher rate than Granby, which declined at a much slower rate than the previous decade. Between 1991 and 2001 Everton then began to grow, whilst Granby continued its decline at a higher rate.

Population

30000
25000
15000
10000
1971
1981
1991
2001

Figure 33. Population change in Everton and Granby

3.32. The age structure of the population for 1981, 1991 and 2001 is displayed in figures 34a, 34b and 34c below. A number of notable trends can be identified. Firstly, the proportion of 15-29 year olds in Everton can be seen to have declined between 1981 and 1991, but increased substantially between 1991 and 2001. Everton can also be seen have experienced a drop in the proportion of 0-14 year olds between 1981 and 2001. Granby, on the other hand, shows a much more stable distribution of ages across the 30 year period, only seeing a slight increase in the proportion of 0-14's in 1991.

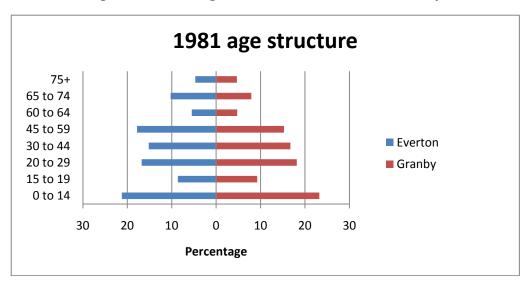


Figure 34a. 1981 age structure in Everton and Granby

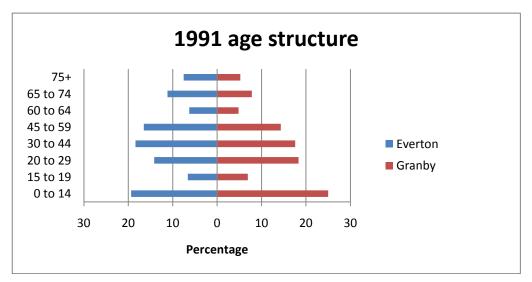
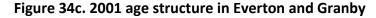
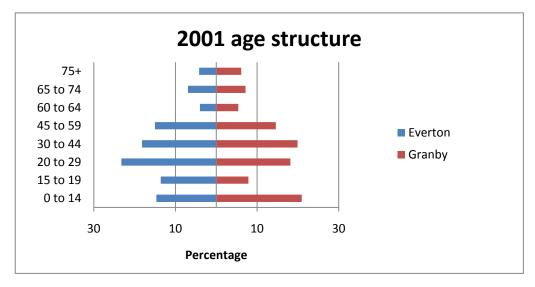


Figure 34b. 1991 age structure in Everton and Granby





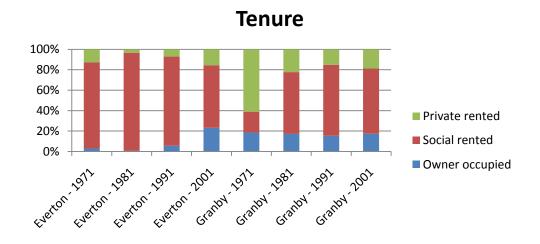
3.34. It can be seen from figure 35. below that Granby experienced a higher rate of household decline than Everton over the 30 year period, and continued to decline between 1991 and 2001. Everton, on the other hand, saw a rise in households during this decade. Both Everton and Granby, as well as Liverpool as a whole, have experienced similar rates of decline in their average household size, as figure 35. also displays. However, the two wards have seen an increase in one person households at a much higher percentage than Liverpool. Everton in particular has moved from having approximately the same proportion of one person households in 1971 (around 20%) to having a much higher level in 2001 (50%, compared to Liverpool's 37%).

Figure 35. Households in Everton and Granby

Total number of Average household size households 4.0 3.0 10000 Everton 2.0 5000 Granby 1.0 Liverpool Granby 0 0.0 1971 1981 1991 2001 1971 1981 1991 2001

3.35. Figure 36. below shows tenure in the two wards for the four Census years. It can be seen that across the 30 year period Everton has broadly seen a decrease in the proportion of socially rented accommodation, whilst Granby has broadly seen an increase and with regard to vacancy rates, over the 30 year period displayed in the figure 37. Granby has consistently maintained higher vacancy rates than Everton, and Liverpool as a whole. Indeed, this was particularly pronounced in 2001 with the Granby rate (11.5%) being 7.1% higher than in Everton (4.4%).

Figure 36. Housing tenure in Everton and Granby



Note: Although the above data is displayed in percentages, the counts vary. 1971 and 1981 are counts of households, 1991 is counts of dwellings and 2001 is household spaces. The data is therefore not directly comparable, but provides the closest available approximation of trends in tenure.

Vacancy rate

20
15
10
Granby
5
1971
1981
1991
2001

Figure 37. Vacancy rates in Everton and Granby

3.36. Between 1971 and 2001 the unemployment rate in the two wards has been consistently higher than the Liverpool average (over the four Census years, Everton was an average of 13.1% higher than Liverpool, and Granby an average of 13.6% higher). Figure 38. below displays that from 1971 until 1991 the city as a whole saw a rise in unemployment – in the two wards this was particularly sharp. In 1991 both wards had a higher rate than Liverpool than at any other point. Everton experienced higher levels than Granby until 1991, but in the following decade unemployment would drop sharply in Everton so that in 2001 its levels were almost as low as the city as a whole. Granby, on the other hand, did not recover to the same extent from the high unemployment levels of the 1991 Census, and would display higher rates than both Everton and Liverpool in 2001.

Unemployment rate

-- Everton
Granby
Liverpool

Figure 38. Unemployment in Everton and Granby

3.37. A comparison of Everton and Granby therefore illustrates that processes of shrinkage have varied across the city, and that the path-dependent characteristics of different areas both affect, and are affected by, the nature of shrinkage in a particular locality.

CONCLUSIONS

- 4.1. Liverpool has undergone a long period of change over the past four decades. During the 1970s and 1980s the conurbation experienced massive deindustrialisation and economic restructuring which led to a period of rapid population decline. Within the conurbation a combination of housing policies and an outward movement of jobs stimulated a faster rate of population decline in the core city than in the periphery of the conurbation.
- 4.2. Subsequently the development of strong policies for urban regeneration coupled with powerful restraints on peripheral growth slowed the rate of population loss. Since the 1990s the emerging trend towards economic growth based upon a post-industrial economy (growth based upon services) has led to a revival of the core city to the point where it is now on the cusp of experiencing reurbanisation.
- 4.3. The consequences of population decline have been seen particularly in the housing system where a housing shortage in 1971 became a surplus after 1991. This facilitated the removal of some of the least sought after dwellings from the housing stock. At the same time the housing system remained quite well balanced over the period, with vacancy rates generally no more than one and a half times the national average and only briefly rising above 6%. Furthermore dwelling prices in the core city have rarely fluctuated significantly from a fairly consistent position at around 70% of the national average.
- 4.4. The period of intense population decline was also associated with a high rate of unemployment. However, with the improving national economic situation through the 1990s and the emergence of growth in jobs in the service sector (especially financial services, public administration, education, health and leisure services), unemployment in the core city fell steadily after 1991.
- 4.5. In terms of service provision the biggest impact of population decline has been on the provision of schools. Although the position is complicated by parental choice and private sector provision, the City Council has over the decades, undertaken a number of rationalisations of school provision resulting in the closure of a considerable number of schools.
- 4.6. Overall the study of Liverpool shows the dynamics of urban change and decline but most importantly it shows how, with a combination of strong urban regeneration policies complementing a changing in economic structure, a city can move from a period of shrinkage towards reurbanisation.

CRC/MC 10.02.2010

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Appendix 1. Data tables.

Table A1. Population

	1971	1981	1991	2001	2008
Liverpool	610114	517000	475600	441900	434900
Merseyside	1656545	1522000	1438000	1367800	1347800
UK	55610000	56348000	57801000	59113500	61383200

Source: Census data; NOMIS; Annual Abstract of Statistics

Note: All figures are mid-year population estimates, apart from the 1971 Liverpool

figure.

Table A2. Population rates of change

	1971-81	1981-91	1991-01	2001-08
Liverpool	-15.3	-8.0	-7.1	-1.6
Merseyside	-8.1	-5.5	-4.9	-1.5
UK	1.3	2.6	2.3	3.8

Source: Same as population above

Table A3a. Births, Deaths and Natural Change – Liverpool

		. births, Deaths	Liverpool	0 1	
	Births	Birth rate	Deaths	Death rate	Natural change
1971	9551	15.8	7966	13.2	1585
1972	8514	14.5	7978	13.6	536
1973	7411	12.9	8033	14	-622
1974	6871	12.2	7851	14.0	-980
1975	6594	12.0	7525	13.7	-931
1976	6364	11.8	7688	14.2	-1324
1977	6120	11.4	7339	13.7	-1219
1978	6308	11.9	7307	13.8	-999
1979	6952	13.4	7594	14.6	-642
1980	6825	13.3	7083	13.8	-258
1981	6983	13.5	6977	13.4	6
1982	6764	13.2	7185	14.1	-421
1983	6942	13.8	6736	13.4	206
1984	7053	14.2	6464	13.0	589
1985	7254	14.8	6839	13.9	415
1986	7226	15.0	6527	13.5	699
1987	7178	15.1	6335	13.3	843
1988	7188	15.3	6260	13.3	928
1989	6974	15.0	6399	13.7	575
1990	7272	15.7	5949	12.9	1323
1991	6957	14.7	6042	12.7	915
1992	6528	13.6	5877	12.3	651
1993	6330	13.3	6002	12.6	328
1994	6061	12.8	5741	12.1	320
1995	5925	12.6	5858	12.4	67
1996	6019	12.9	5818	12.4	201
1997	5667	12.2	5603	12.1	64
1998	5545	12.0	5517	12.0	28
1999	5121	11.2	5388	11.8	-267
2000	5164	11.3	5229	11.4	-65
2001	4915	11.2	5175	11.8	-260
2002	4923	11.2	5175	11.7	-252
2003	5102	11.5	5074	11.6	28
2004	5044	11.3	4877	11.2	167
2005	5188	11.6	4644	10.6	544
2006	5494	12.6	4613	10.6	881
2007	5370	12.3	4540	10.4	830
2008	5595	12.9	4592	10.6	1003

Source: UK Office of National Statistics

Table A3b. Births, Deaths and Natural Change – Merseyside

		(110) 2 040110 4	Merseyside	inge – ivierseysi		
	Births	Deaths	Birth rate	Death rate	Natural change	
1971	29158	20560	16.6	11.7	8598	
1972	26620	21074	15.3	12.1	5546	
1973	24130	21051	13.9	12.1	3079	
1974	20838	20327	13.0	12.7	511	
1975	19947	19708	12.6	12.4	239	
1976	18919	20281	12.0	12.9	-1362	
1977	17950	19536	11.5	12.5	-1586	
1978	18978	19577	12.3	12.7	-599	
1979	20205	20150	13.2	13.2	55	
1980	20300	19026	13.4	12.5	1274	
1981	20021	18950	13.1	12.4	1071	
1982	19874	19605	13.2	13	269	
1983	20027	18569	13.3	12.4	1458	
1984	19805	18208	13.3	12.2	1597	
1985	20519	19008	13.9	12.8	1511	
1986	20417	18258	13.9	12.4	2159	
1987	20199	17993	13.9	12.4	2206	
1988	20595	17709	14.2	12.2	2886	
1989	20056	18496	13.9	12.8	1560	
1990	20834	17594	14.4	12.2	3240	
1991	20338	17910	14.1	12.4	2428	
1992	19021	17272	13.2	11.9	1749	
1993	18490	18032	12.8	12.5	458	
1994	17755	17086	12.4	11.9	669	
1995	17168	17445	12.0	12.2	-277	
1996	17211	17330	12.1	12.2	-119	
1997	16508	16905	11.7	12.0	-397	
1998	16006	16899	11.4	12.0	-893	
1999	15236	16644	10.9	11.9	-1408	
2000	15216	15929	10.8	11.4	-713	
2001	14449	15970	10.6	11.7	-1521	
2002	14295	15837	10.5	11.6	-1542	
2003	15071	15887	11.0	11.7	-816	
2004	15170	15057	11.1	11.1	113	
2005	15203	14932	11.1	11.0	271	
2006	15786	14501	11.7	10.7	1285	
2007	15810	14854	11.7	11.0	956	
2008	16237	14802	12.0	11.0	1435	

Source: UK Office of National Statistics

Table A3c. Births, Deaths and Natural Change – England and Wales

	England and Wales										
	Births	Birth rate	Deaths	Death rate	Natural change						
1971	783155	16	567262	11.6	215893						
1972	785133	14.8	591907	12.1	133533						
1973	675953	13.7	587478	11.9	88475						
1973	639885	13.7	585292	11.9	54593						
1974	603445	12.3	582841	11.9	20604						
1975		11.9	598516	12.2							
1976	584270	11.9		11.7	-14246						
	569259		575928		-6669						
1978	596418	12.1	585901	11.9	10517						
1979	638028	13	593019	12.1	45009						
1980	656234	13.3	581385	11.8	74849						
1981	634492	12.8	577890	11.7	56602						
1982	625931	12.6	581861	11.7	44070						
1983	629134	12.7	579608	11.7	49526						
1984	636818	12.8	566881	11.4	69937						
1985	656417	13.1	590734	11.8	65683						
1986	661018	13.2	581203	11.6	79815						
1987	681511	13.6	566994	11.3	114517						
1988	693577	13.8	571408	11.3	122169						
1989	687725	13.6	576872	11.4	110853						
1990	706140	13.9	564846	11.1	141294						
1991	699217	13.7	570044	11.2	129173						
1992	689656	13.4	558313	10.9	131343						
1993	673467	13.1	578170	11.2	95297						
1994	664726	12.9	553194	10.7	111532						
1995	648138	12.5	569683	11.0	78455						
1996	649485	12.5	560135	10.8	89350						
1997	725810	12.3	555281	10.6	170529						
1998	635901	12.1	555015	10.6	80886						
1999	621872	11.8	556118	10.6	65754						
2000	604441	11.4	535664	10.1	68777						
2001	594634	11.4	530373	10.1	64,261						
2002	596122	11.4	533527	10.1	62,595						
2003	621469	11.8	538254	10.2	83,215						
2004	639721	12.1	512541	9.7	127,180						
2005	645835	12.1	512692	9.6	133,143						
2006	669601	12.5	502599	9.4	167,002						
2007	690013	12.8	504052	9.3	185,961						
2008	708711	11.5	509090	9.4	199,621						

Source: UK Office of National Statistics

Table A4. Gross Domestic Product (GDP)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Liverpool	13500	14000	17200	19700	21100	24300	23800	25800	25500	26100	27900	30300
Merseyside	10900	11500	14300	16000	16800	19700	19700	21200	20300	21000	21700	23000
UK	15200	16500	20600	22200	24000	27200	27800	28800	27700	29600	30400	32000

Source: Eurostat

Note: Figures are Euro per inhabitant. GDP at current market prices.

Table A5. Total number of households

	1971	1981	1991	2001
Liverpool	194465	181228	184813	187865
Merseyside	528440	529912	554109	571311
UK	18746000	20095000	22563818	24479439

Source: Census data

Note: 1971 and 81 UK figures are estimates, calculated by dividing the total UK population over the average household size of the UK.

Table A6. Average household size

	1971	1981	1991	2001
Liverpool	3.1	2.9	2.6	2.4
Merseyside	3.1	2.9	2.6	2.4
UK	3.0	2.8	2.6	2.4

Source: Census data

Note: 1971 and 81 UK figures are calculated using estimates calculated for 'total households'.

Table A7. In and out migration

1981	1991	2001
31973	25135	36058
5278	4364	5516
54590	44894	56573
8304	6696	9994
16663	12374	15764
24967	19070	25758
8671	7613	15076
4552	3318	4666
70791	59630	73628
15042	14667	21949
	31973 5278 54590 8304 16663 24967 8671 4552 70791	31973 25135 5278 4364 54590 44894 8304 6696 16663 12374 24967 19070 8671 7613 4552 3318

Source: Census data

Note: Census output is Crown copyright and is reproduced with the permission of the Controller of HMSO and the Queen's Printer for Scotland

Table A8. Age percentages of population

	All ages	0 to 4	5 to 9	10 to 14	15 to 19	20 to 29	30 to 44	45 to 59	60 to 64	65 to 74	75 to 84	85 and over
Liverpool	434,900	5.7%	5.0%	5.4%	7.1%	19.3%	19.2%	18.7%	4.9%	7.7%	5.3%	1.6%
Merseyside	1,347,800	5.7%	5.3%	6.0%	7.1%	14.2%	19.1%	19.8%	5.8%	8.9%	6.1%	2.0%
UK	61383200	6.0%	5.5%	6.0%	6.5%	13.5%	21.1%	19.2%	5.9%	8.4%	5.6%	2.2%

2001

	All ages	0 to 4	5 to 9	10 to 14	15 to 19	20 to 29	30 to 44	45 to 59	60 to 64	65 to 74	75 to 84	85 and over
Liverpool	441900	5.6%	6.0%	6.9%	7.6%	15.3%	21.9%	16.8%	4.7%	8.5%	5.0%	1.6%
Merseyside	1367800	5.6%	6.4%	7.1%	6.9%	11.9%	21.8%	18.5%	5.1%	9.2%	5.6%	1.8%
UK	59051000	5.9%	6.3%	6.6%	6.2%	12.7%	22.7%	18.9%	4.9%	8.4%	5.6%	1.9%

1991

	All ages	0 to 4	5 to 9	10 to 14	15 to 19	20 to 29	30 to 44	45 to 59	60 to 64	65 to 74	75 to 84	85 and over
Liverpool	475600	7.2%	6.8%	5.9%	6.5%	18.1%	19.7%	15.1%	5.2%	8.7%	5.3%	1.4%
Merseyside	1438000	7.0%	6.8%	6.2%	6.6%	15.7%	20.1%	16.3%	5.4%	9.0%	5.5%	1.5%
UK	57439000	6.7%	6.4%	6.1%	6.5%	15.9%	21.1%	16.5%	5.0%	8.8%	5.4%	1.5%

1981

	All ages	0 to 4	5 to 9	10 to 14	15 to 19	20 to 29	30 to 44	45 to 59	60 to 64	65 to 74	75 to 84	85 and over
Liverpool	517000	5.9%	6.0%	7.8%	9.2%	16.1%	16.5%	17.3%	5.5%	9.7%	4.9%	1.1%
Merseyside	1522000	6.2%	6.6%	8.3%	8.9%	14.6%	18.0%	17.4%	5.2%	9.2%	4.7%	1.0%
UK	56357000	6.1%	6.5%	7.9%	8.4%	14.4%	19.4%	16.9%	5.2%	9.2%	4.8%	1.1%

1971

	All ages	0 to 4	5 to 9	10 to 14	15 to 19	20 to 29	30 to 44	45 to 59	60 to 64	65 to 74	75 to 84	85 and over
Liverpool	610110	7.6%	8.5%	8.4%	8.1%	14.0%	16.0%	18.4%	6.0%	8.4%	3.7%	0.8%
Merseyside	1656550	8.2%	9.1%	8.6%	7.7%	13.3%	17.2%	18.0%	5.6%	8.1%	3.6%	0.8%
UK	55928000	8.1%	8.4%	7.6%	6.9%	14.2%	17.5%	18.2%	5.8%	8.5%	3.9%	0.9%

All data mid-year estimates.

Source: Census data; NOMIS; Annual Abstract of Statistics

Table A9. Dependency rate (UK only)

	Economically active	Economically inactive	Rate
2001	28272000	30841500	1.09
1991	28772000	29029000	1.01
1981	26385000	29963000	1.14
1971	24963000	30647000	1.23

Source: Regional Trends; Abstract of Regional Statistics

Note: Dependency rate is calculated by dividing the total economically inactive by the total economically active. The economically inactive figure is calculated by taking the economically active figure away from the total UK population.

Table A10. Proportion of one person households

	1971	1981	1991	2001
Liverpool	19.9	25.1	31.4	36.9
Merseyside	21.0	22.2	27.9	32.5
UK	18.2	21.7	26.6	30.3

Source: Census data

Note: 1971 and 81 UK figures do not include Northern Ireland. Merseyside figure is a calculated estimate based upon other figures.

Table A11. Number of persons employed

			•		
	1971	1981	1991	2001	2008/09
Liverpool	257140	190115	154431	157181	165100
Merseyside	692455	587060	527156	529591	543300
UK	22122000	21192000	24867243	26726896	27894500

Source: Census data; Regional Trends; NOMIS (Annual Population Survey)

Table A12. Unemployment rate

	1971	1981	1991	2001	2008/09
Liverpool	10.6	20.4	21.6	11	8.7
Merseyside	8.5	16.7	16	8.4	8.2
UK	2.8	9.0	9.4	5.2	6.3

Source: Census data; Annual Abstract of Statistics; Annual Population Survey

Note: The unemployment rate is the number of unemployed of working age as a percentage
of the economically active population of working age, ie those working or unemployed.

Working ages are as follows:

- · 1971 15-59 (women) and 15-64 (men)
- · 1981 and 1991 16-59 for women and 16-64 for men
- · 2001 16-74

Table A13. Proportion long term unemployed (claimants over 12 months)

	Liverpool	Merseyside	UK
March 1994	49.0	45.1	37.5
September 1994	49.2	45.6	37.9
March 1995	49.1	44.7	37.3
September 1995	48.3	43.8	36.8
March 1996	46.0	41.6	35.8
September 1996	46.4	41.7	36.4
March 1997	47.1	42.4	36.4
September 1997	42.7	38.3	31.3
March 1998	38.3	33.8	26.5
September 1998	39.1	33.9	27.2
March 1999	34.8	29.6	24.7
September 1999	31.9	28.1	24.1
March 2000	29.0	25.8	22.1
September 2000	30.0	26.8	22.0
March 2001	28.6	25.2	19.6
September 2001	27.2	24.6	19.5
March 2002	25.3	22.1	16.1
September 2002	25.9	22.3	15.9
March 2003	24.6	20.3	14.4
September 2003	25.1	21.0	15.2
March 2004	24.2	20.0	15.1
September 2004	24.4	20.1	15.9
March 2005	23.8	18.6	14.0
September 2005	24.0	18.8	14.1
March 2006	22.6	17.5	14.1
September 2006	24.6	19.5	16.7
March 2007	26.5	20.2	16.4
September 2007	24.7	20.1	16.2
March 2008	23.6	18.1	12.9
September 2008	22.2	16.4	10.6
March 2009	17.9	13.0	7.7
September 2009	20.4	15.8	10.7

Source: NOMIS (Office of National Statistics (ONS) Crown Copyright Reserved)

Note: Figure are for claimant counts, and do not correlate directly with number of unemployed. Figures denote proportion of total claimants claiming for over 12 months

Table A 14. Economic activity rate

	1981	1991	2001
Liverpool	45.9	41.2	40.0
Merseyside	46.1	43.5	42.3
UK	46.8	49.8	47.8

Source: Census data; Regional Trends; Abstract of Regional Statistics

Note: Figures displays are those economically active as a percentage of total population

Table A15. Household spaces

	1971	1981	1991	2001
Liverpool	193210	201632	196670	197824
Merseyside	543360	573260	580444	595536
UK	19457000	21836894	23751210	25506006

Source: Census data; Annual Abstract of Statistics

Note: 1971 and 81 Northern Ireland figure is an estimate based upon the Great Britain rate of change during the relevant period. The UK figure includes this estimate.

Table A16. Vacancy rates

	1971	1981	1991	2001
Liverpool	3.1	6.2	5.9	4.9
Merseyside	3.2	4.6	4.5	3.9
UK			4.8	3.3

Source: Census data

Note: Vacancy rate is calculated as vacant spaces as a percentage of total household spaces.

Table A17. Population density (population per square kilometre)

(population of the particular per order of the particular per order of the particular per order or the per o								
	1971	1981	1991	2001	2008			
Liverpool	5455.0	4622.5	4252.3	3951.0	3888.4			
Merseyside (total)	2568.7	2360.1	2229.8	2121.0	2090.0			
Merseyside (outer areas)		1885.4	1805.5	1737.0	1712.6			
UK	228.8	231.8	237.8	243.2	252.5			

Source: Population – see 'population' above. Land area – ONS Standard Area Measurements 2007

Note: The UK figure is area to mean high water mark minus the area of inland water features larger than 1km squared. However, inland water measurements were not available for Northern Ireland, so the figure is slightly over the reality.

Table A18. Brownfield land

Liverpool

	2001	2002	2003	2004	2005	2006	2007
Total land area (sq km)	111.8442	111.8442	111.8442	111.8442	111.8442	111.8442	111.8442
Brownfield land (sq km)	5.77	5.37	4.83	5.39	6.33	5.34	6.03
Share of brownfield land (%)	5.16	4.80	4.32	4.82	5.66	4.77	5.39

Merseyside

	2001	2002	2003	2004	2005	2006	2007
Total land area (sq km)	644.8878	644.8878	644.8878	644.8878	644.8878	644.8878	644.8878
Brownfield land (sq km)	15.82	13.15	15.79	15.74	16.39	15.95	13.78
Share of brownfield land (%)	2.45	2.04	2.45	2.44	2.54	2.47	2.14

England

	2001	2002	2003	2004	2005	2006	2007
Total land area (sq km)	130279.4	130279.4	130279.4	130279.4	130279.4	130279.4	130279.4
Brownfield land (sq km)	411.3	407.1	397.1	381.7	365.6	348.5	336
Share of brownfield	0.32	0.31	0.30	0.29	0.28	0.27	0.26
land (%)							

Source: Brownfield data from National Land Use Database for previously developed land. Total land area from ONS Standard Area Measurements (2007)

Table A19. Occupational data

		Category 1	Category 2	Category 3	Unemployed
1001	Liverpool	40108	76036	38287	36377
1991	Other Merseyside	114354	185695	72676	46155
2001	Liverpool	54830	66647	35704	19421
2001	Other Merseyside	134389	159714	78307	29029
2000	Liverpool	68966	66179	29955	15700
2009	Other Merseyside	160175	151380	66645	32800

Table A20. VAT registrations, stock at end of year

		Agriculture Forestry and Fishing, Mining and quarrying; Electricity, gas and water supply	Manufacturing	Construction	Wholesale retail and repairs	Hotels and restaurants	Transport storage and communication	Financial intermediation .	Real Estate renting and business activities	Public administration; Other community, social and personal services	Education, health and social work
	Liverpool	30	810	860	2,375	715	395	100	1,405	480	150
1994	Other Merseyside	310	1,570	1,855	4,810	1,145	775	105	2,415	1,060	315
	Liverpool	30	745	780	2,170	760	365	130	2,155	525	150
2000	Other Merseyside	305	1,480	1,855	4,305	1,120	765	130	3,595	1,105	300
	Liverpool	25	670	1,015	2,090	985	370	145	3,050	605	185
2007	Other Merseyside	315	1,530	2,600	4,250	1,505	885	155	4,935	1,235	345

Source: NOMIS (VAT registrations/deregistrations by industry)

Table A21. Bus and rail journeys

	Bus Journeys	Rail Journeys
1985/86	320.3	41.2
1986/87	229.2	43.9
1987/88	227.3	44.4
1988/89	227.9	45.3
1989/90	233.1	-
1990/91	227.8	39.4
1991/92	206.7	33.5
1992/93	198.6	31
1993/94	197.6	29.5
1994/95	198.4	28.9
1995/96	197.7	27.8
1996/97	177.4	29.2
1997/98	176.6	27.5
1998/99	168.5	29.4
1999/00	169.8	31.5
2000/01	169.2	32.1
2001/02	170.6	33.1
2002/03	169.5	32.1
2003/04	165.9	33
2004/05	164.3	34.1
2005/06	162.9	35.3
2006/07	153.8	37
2007/08	147.7	38.4
2008/09	148.7	39.1

Source: Merseytravel data. Note: The highlighted figures are not directly comparable with other figures (see appendix 2 for an explanation)

Table A22. Everton and Granby population

	1971	1981	1991	2001
Everton	17623	13831	6310	7398
Granby	24006	15267	14147	10978

Source: Census data

Table A23a. Everton and Granby age distribution (percentage of total) - 1981

	Everton	Granby
0 to 14	21.23822	23.21536
15 to 19	8.618514	9.267343
20 to 29	16.76193	18.16533
30 to 44	15.16591	16.72823
45 to 59	17.8012	15.27097
60 to 64	5.485859	4.741119
65 to 74	10.24423	7.917534
75+	4.684136	4.694111

Source: Census data

Table A23b. Everton and Granby age distribution (percentage of total) - 1991

	Everton	Granby
0 to 14	19.36016	24.98272
15 to 19	6.596306	6.927271
20 to 29	14.16557	18.33961
30 to 44	18.3872	17.58697
45 to 59	16.50726	14.32302
60 to 64	6.266491	4.822978
65 to 74	11.16425	7.81046
75+	7.55277	5.206973

Source: Census data

Table A24c. Everton and Granby age distribution (percentage of total) - 2001

	Everton	Granby
0 to 14	14.69316	20.93277
15 to 19	13.6253	7.852068
20 to 29	23.27656	18.12716
30 to 44	18.22114	19.89433
45 to 59	15.03109	14.55639
60 to 64	4.001081	5.383494
65 to 74	6.934307	7.150665
75+	4.217356	6.103115

Source: Census data

Table A25. Everton and Granby total number of households

	1971	1981	1991	2001
Everton	4869	4987	2660	3168
Granby	8489	5668	5754	5301

Source: Census data

Table A26. Everton and Granby average size of households

	1971	1981	1991	2001
Everton	3.6	2.8	2.4	2.3
Granby	2.8	2.7	2.5	2.1

Source: Census data

Table A27. Everton and Granby tenure (percentage of total dwellings/households)

	Owner occupied	Social rented	Private rented
Everton - 1971	3.0	84.2	12.8
Everton - 1981	0.7	95.9	3.4
Everton - 1991	5.7	87.2	7.1
Everton - 2001	23.1	61.3	15.5
Granby - 1971	18.7	20.2	61.0
Granby - 1981	17.2	60.4	22.4
Granby - 1991	15.3	69.6	15.0
Granby - 2001	17.4	64.0	18.6

Source: Census data

Table A28. Everton and Granby vacancy rate

	1971	1981	1991	2001
Everton	2.5	15.1	8.3	4.4
Granby	6.2	18.7	11.1	11.5

Source: Census data

Table A29. Everton and Granby unemployment rate (of working age)

	1971	1981	1991	2001
Everton	19.8	37.6	45.1	13.4
Granby	18.1	34.6	41.6	23.8

Source: Census data

Appendix 2. Data sources

Table A1 and Table A2. Population

Except for the 1971 Liverpool and Merseyside counts, all figures are population estimates. Mid-year population estimates are based on results from the latest Census of Population with allowance for under-enumeration. Estimates are provided where possible, rather than actual counts, because they are designed to be used for time-series and are adjusted to minimise problems such as under-enumeration which, for example, affected the 1991 Census. The mid-year estimates are taken from the NOMIS web site (www.nomisweb.co.uk) – run by the British Office of National Statistics (ONS) – as well as past copies of the Annual Abstract of Statistics publication (CSO, 1974; CSO, 1984a; CSO, 1994a; ONS, 2004a).

The 1971 Liverpool figure is taken from the CASWEB web site, run by the British Census Dissemination Unit. CASWEB contains Census data back to 1971, and is available through subscription. The 1971 Merseyside figure is taken from the 1974 Census Merseyside County Report, Table 2 (Central Statistical Office, 1974).

Table A3. Births and Deaths

Number of births and deaths are from the UK Office of National Statistics web site (www.statistics.gov.uk). The birth and death rates, and natural change figures, are calculated by LJMU.

Table A4. Gross Domestic Product (GDP)

GDP figures are taken directly from the Eurostat web site. Figures are for Euro per inhabitant, and GDP is at current market prices.

Table A5. Total number of households

The definition of 'household' used by the British Office of National Statistics is:

One person or a group of people who have the accommodation as their only or main residence AND (for a group) either share at least one meal a day, or share the living accommodation, that is, a living room or sitting room (CLG, 2009)

A group of people would not be counted as a household solely on the basis of a shared kitchen or bathroom. The sources for the data displayed in Table A4 will now be detailed, taking each year in turn.

2001 – figures are from CASWEB. Liverpool and Merseyside figures are from Table CS 053, and UK figures are from Table TT008, apart from Northern Ireland figures, which are from Table ST062.

1991 – data is for 'households' with a 1991 population base (which includes 1991 households enumerated or absent (1991 population base); present and absent residents and imputed members of wholly absent households; rooms). Figures are from CASWEB, Table SAS27.

1981 – data is for 'households' with a 1981 population base (including private households with one or more usual residents with at least one person (a resident or visitor) present, or with a visitor or visitors present but no usual residents i.e. a household with '0 persons'). Liverpool and Merseyside figures are from CASWEB, Table SAS 81 17. Due to limitations in the data sources, the 1981 UK figure is an estimate. The estimate has been calculated by Liverpool John Moores University (LIMU) by dividing the UK population by the average household size of the UK (calculated using the population and household figures described above).

1971 – Liverpool and Merseyside figures are from the 1971 Census Merseyside County Report (Table 29) (Office of Population Censuses and Surveys, 1975). The UK figure for 1971 is also an estimate, calculated in the same way as described above for 1981.

Table A6. Average household size

Figures are calculated by LJMU using the population and household figures already presented.

Table A7. In and out migration

Figures are calculated using Centre for Interaction Data Estimation and Research (CIDER) Census tables (Table MG101 - Special Migration Statistics (Level 1)) – available online through subscription.

The figures presented are the number of people that migrated in the year prior to the Census. So, for example, for 1991 data the figure is the count of people migrating between 22nd April 1990 and 21st April 1991 (the date of the 1991 census). The count is based on the net change between those two dates. So if someone moved more than once, it would still only be recorded as one migration (from wherever they were in April 1990).

Table A8. Age percentages of population

Data used is again mid-year estimates. 2008, 2001, 1991 and 1981 Liverpool and Merseyside figures are taken from NOMIS mid-year population estimates. The 1971 Liverpool and Merseyside figures are from the 1971 Census Merseyside County Report (Table 8) (Office of Population Censuses and Surveys, 1975). All UK data is from the 2004 Annual Abstract of Statistics (Table 5.3) (ONS, 2004a), except for the 2008 figures, which are NOMIS mid-year population estimates.

Table A9. Dependency rate (UK only)

The dependency rate is calculated using the following formula:

Dependency rate =
$$\frac{\text{total economically inactive}}{\text{total economically active}}$$

The dependency rate is only provided for the UK, because it is the state level at which the rate is most relevant due to tax and welfare being administered at this level.

Those economically active are persons over 15 in 1971, and over 16 for other years (except for 2001, which is 16-74), who are working, on a government scheme (a category included in the 1991 Census) or unemployed. Those economically inactive are generally retired, permanently sick/disabled or looking after home/family. Students can be included in either category, depending upon their individual situation. Details for the sources of the economically active and inactive data presented will now be given.

2001 –UK figures are for 'labour force' (an equivalent figure to 'economically active') and from the 2004 Regional Trends (ONS, 2004b), Table 5.1. The economically inactive figure is calculated by LJMU by taking the economically active figure away from the total UK population (as presented in Table A1).

1991 –The UK figure is again for 'labour force' and from the 1994 Regional Trends (CSO, 1994b), Table 5.1. The economically inactive figure is again calculated by LJMU by taking the economically active figure away from the total UK population (as presented in Table A1).

1981 –The UK figure is for 'civilian working population' and from the 1984 Regional Trends (CSO, 1984b), Table 7.1. The economically inactive figure is calculated using the same method as described above.

1971 –The UK figure is for 'working population' and from the 1984 Regional Trends publication (CSO, 1984b), Table 39.

Table A10. Proportion of one person households

The figures presented are one person households as a percentage of total households. The data sources are the same as for Table A4 above. However, the 1971 and 1981 UK figures used in the calculations do not include Northern Ireland, and the Merseyside figure is a calculated estimate based upon other figures.

Table A11. Number of persons employed

The number of persons employed is defined as "persons aged 16 and over who regard themselves as paid employees" (ONS, 2004b, p. 65). Details about the data gathered for each year will now be given in turn.

2008/09 - Data is from NOMIS (Annual Population Survey), and for April 2008 to March 2009. The figure is for employed of working age.

2001 – All data is for aged 16-74 and from CASWEB, Table KS009a. LJMU used the same method as above to calculate employment figure.

1991 – All figures are for aged 16 and over and from CASWEB (Table SAS 08). LJMU created the employed figure by taking unemployed away from economically active.

1981 – Liverpool data is for aged 16 and over, and from CASWEB (Table81 09). The only categories available were 'total economically active', 'full time employed', 'not in

employment' and 'self-employed'. LIMU therefore calculated the 'total economically active' minus 'not in employment' to work out the employment figure. The UK figure is from Regional Trends (Central Statistical Office (CSO), 1984b), Table 7.1.

1971 – Liverpool data is for aged 15 and over, and from CASWEB (Table 05). The Merseyside figure is from the Census county report (table 18). This figure is also for aged 15 and over. The figure denotes those 'working'. The UK figure is from Regional Trends (Central Statistical Office (CSO), 1984b), Table 7.1. Data is for 'civilian working population'. The 1981 figure is a provisional figure, and may have been subject to future revision.

Table A12. Unemployment rate

The unemployment rate used is the number of unemployed of working age as a percentage of the economically active population of working age, ie those working or unemployed. Working ages for different years are as follows:

- · 1971 15-59 (women) and 15-64 (men)
- · 1981 and 1991 16-59 for women and 16-64 for men
- · 2001 16-74

The data in Table A11 has been calculated by LJMU using unemployment and economic activity (of working age) counts. These are from a variety of sources, and explained below for each year.

2008/09 - Figures are from the Annual Population Survey (downloadable from NOMIS). Data used represents the number of economically active and unemployed of working age from April 2008 to March 2009.

2001 – Figures are Census data taken from CASWEB, Table ks009a, and calculated by LJMU.

1991 – The Liverpool figure is Census statistics calculated by, and taken from, the publication Key Statistics Liverpool Wards 1971/81/91 (Table 7) (LCC, 1993). For Merseyside, the figures are taken from CASWEB (Table SAS 08) and calculated by LJMU. The UK figures are also from CASWEB, the same table.

1981 – Liverpool data is taken from the Key Statistics Liverpool Wards 1971/81/91 publication (Table 7). The Merseyside figure has been calculated by LJMU using statistics from CASWEB, Table SAS 81 09. The UK figure is from the 1984 Annual Abstract of Statistics (Table 6.1) (CSO, 1984a). The economically active statistic has been calculated by adding together figures for 'unemployed' and 'employed'.

1971 — Data used is from CASWEB, Table 05. The Liverpool measure for unemployment is calculated by adding together figures for those 'seeking work' and 'sick'. Merseyside figures are from the Census County Report (Table 18), and have been calculated by LJMU for the correct age brackets. The UK figure is from the 1974 Annual Abstract of Statistics (Table 142) (CSO, 1974). The economically active figure

is again calculated by adding together measurements for 'unemployed' and 'employed'.

Table A13. Proportion long term unemployed (claimants over 12 months)

Figures are from the Claimant Counts, available for download from NOMIS. The Claimant Count is a monthly count of job seekers allowance (JSA) claimants broken down by age and the duration of claim. Totals exclude non-computerised clerical claims (approx. 1%). The proportion of long term unemployed has been calculated by LJMU by taking those who have been claiming for over 12 months at a particular instant in time as a proportion of the total claimants at that time.

Although these figures are not directly comparable with the unemployment figures given in Table A11, they are the most up-to-date and accurate measurement of long term unemployment publically available.

Table A14. Economic activity rate

The economic activity rate is members of the population who are economically active as a proportion of the total population. Economic activity figures are the same as those used in Table A11. The total population figures are those used in Table A1, also explained above.

Table A15. Household spaces

For this statistic, a 'household space' has been used as the equivalent of a 'dwelling'. Sources vary on whether they provide data for household spaces or dwellings. A household space is defined as the accommodation used by a household. Household spaces can be located in shared or unshared dwellings. A dwelling is defined broadly as "a self-contained unit of accommodation" (CLG, 2009).

The sources for each of the years presented in Table A14 are explained below.

2001 – The Liverpool figure is from Key Statistics Liverpool Wards 1971/81/91 (LCC, 1993), Table 15. All other figures are from CASWEB, Table KS016.

1991 – The Liverpool figure has the same source as 2001 above. UK figures are from CASWEB, Table SAS 55.

1981 – The Liverpool figure is again from Key Statistics Liverpool Wards 1971/81/91, Table 15. The Merseyside and UK figures are from CASWEB, Table SAS81 33. However, details for Northern Ireland for 1981 are not available. A Northern Ireland figure was therefore estimated by LJMU based upon the Great Britain (GB) (GB include England, Wales and Scotland) rate of change during the relevant period and added to the figures from CASWEB for GB to make a UK total.

1971 – The Liverpool and Merseyside figures are from the 1971 Census Merseyside County Report, Table 29 (Office of Population Censuses and Surveys, 1975). In calculating the Merseyside figure, LJMU added together figures for 'occupied

dwellings' and 'vacant dwellings'. However, figures for vacant dwellings were not available for Liverpool, and so the figure presented is just 'occupied dwellings'. The UK figure is 'dwelling stock at end of year' from the 1974 Annual Abstract of Statistics (Table 66) (Central Statistical Office, 1974). Again, details for Northern Ireland for 1971 are not available. A Northern Ireland figure was therefore estimated by LJMU in the same manner as for 1981 and added to the figure from the Annual Abstract of Statistics for Great Britain.

Table A16. Vacancy rates

The vacancy rate is calculated as vacant spaces as a percentage of total household spaces. The figure has been calculated by LIMU using the household spaces data above, as well as data for vacant spaces. The 'vacant spaces' statistical sources are explained below.

2001 – Census data from CASWEB, Table KS016.

1991 – Liverpool, Merseyside, England, Wales and Scotland figures are Census data from CASWEB, Table SAS54. Counts of vacant spaces for Northern Ireland were unavailable. The UK figure is therefore an estimate calculated by LJMU based upon the Great Britain average.

1981 – All figures are Census data from CASWEB, Table SAS81 11.

1971 - The Liverpool figure is taken from the Key Statistics Liverpool Wards 1971/81/91 document, Table 16 (LCC, 1993). The Merseyside figure is from the 1971 Census Merseyside County Report, Table 29 (Office of Population Censuses and Surveys, 1975).

Table A17. Population density (population per square kilometre)

Population density figures have been calculated by LJMU by dividing the population by the total land area for a particular boundary. The population figures used are those presented in Table A1. Land area figures are from 2007 ONS Standard Area Measurements, available for download from the British Office of National Statistics website (www.ons.gov.uk). The UK figure used is area to mean high water mark minus the area of inland water features larger than 1km squared. However, inland water measurement's were not available for Northern Ireland, so the figure is slightly over the reality. There are no water features larger than 1km squared in Liverpool and Merseyside, and so the figure used just denotes the area to the mean high water mark. The outer Merseyside land area is calculated by taking the Liverpool figure away from the Merseyside figure.

Table A18. Brownfield land

Figures for brownfield land are gathered from the National Land Use Database for previously developed land. This is publically available on the National Land Use Database website (www.nlud.org.uk). The total land areas presented are from ONS Standard Area Measurements, as used for Table A16 above. The proportional calculations have been made by LJMU.

Table A19. Occupational data

The 1991 figures for occupational groups are Census data, but a 10% sample. The figures are provided as the number from the sample. In order to develop a comparable figure, JLMU calculated the percentages for each group from the sample and then applied these percentages to the figures for the total number of employed, as provided in Table 11 above. This then gave a comparable number.

The 2001 figures are complete figures from the 2001 Census. However, in order to provide correlation with the 1991 figure, the percentages have also been calculated and then applied to the number of employed provided in Table 11.

2009 figures are from NOMIS (Annual Population Survey). The same process has been undertaken by LJMU as with the previous two figures to allow comparison.

Table A20. VAT registrations, stock at end of year

Figures are from NOMIS (VAT registrations/deregistrations by industry). The numbers given represent the stock of VAT (value added tax) registered business enterprises at the end of the year. This is an indicator of the size of the business population. Since the vast majority of VAT-registered enterprises employ fewer than 50 people, it is also an indicator of the small business population. However, it should be noted that only 1.9 million of the estimated 4.3 million UK businesses are registered for VAT.

Table A21. Bus and rail journeys

Bus and rail journey data is from Merseytravel. Merseytravel is the body responsible for coordinating public transport in Merseyside in partnership with private bus and rail operators.

Bus figures are for the total number of bus trips within Merseyside for the year specified.

The rail patronage figures listed since 1997/98 take into account changes to the rail network following privatisation, which took effect towards the end of 1997. Prior to 1997/98 calculation methodologies where markedly different, due to changes in the network and the expansion of the Northern and Wirral lines in the early 1990's, so care should be taken when making comparisons with subsequent years.

The current methodology for calculating patronage has been in place since 2003, when Merseyrail Electrics took control of Northern and Wirral lines. This methodology has been applied to patronage totals back to the start of privatisation for this area in 1997.

Patronage figures include journeys along sections of the Merseyrail network that extend beyond the Merseyside boundaries which had previously not been included. They are:

Northern Line - Southport, Ormskirk, Kirkby, Hunts Cross Wirral Line - West Kirby, New Brighton, Ellesmere Port, Chester

With regard to the City Line network (controlled by First North Western, 1997-2004, now known as Northern Rail), patronage along the City Line routes includes:

Liverpool Lime Street - stations up to and including Hough Green Liverpool Lime Street - stations within Merseyside plus Garswood, Earlstown and Newton-le-Willows

City Line services do not include; Southport - Meols Cop and Kirkby - Rainford.

Also excluded are journeys along the Borderlands line (mid-Wirral Line) Bidston - Upton, Heswall and Neston. This line is not supported by Merseytravel; it is operated by Arriva Trains Wales.

Everton and Granby data

The sources for Everton and Granby data are the same as those explained in the text above for Liverpool.

Appendix 2 References

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