Jobs and liveability

A report by Foundational Economy Research Ltd for Karbon Homes



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Your Homes



Byker



Northumberland

A report by Foundational Economy Research Ltd for Karbon Homes

July 2022

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Summary of the report's implications for policy and practice

The report in 100 words

Getting people into work and into higher paid jobs is not a semi-automatic way of raising living standards and solving problems of liveability. This is because the costs of commuting and childcare, plus reduced benefits and higher tax deductions from higher wages, create residual income traps for the low paid. The longstanding result is stressed households in depressed low income districts, where many now face unmanageable increases in the cost of essentials like utility bills, motor fuel and food. The central state can help sort this with tax and benefits reform, but much depends on local and regional actors recognising and addressing issues like transport disadvantage where purposive action can make a difference.

Established policy, contestable assumptions about high pay and the need for new policies on liveability

Over the last two decades it has been recognised that the economy does not deliver good outcomes for many UK citizens and places. Partly as a result, this Government has committed to 'levelling up' which aims to redress the disadvantage of those 'left behind'. The 2022 Levelling Up White Paper recognises social issues about life expectancy, health inequalities and sense of community; but its central argument is that levelling up will be delivered by creating more and better paid jobs as part of a 'high tech, high skill, high wage economy' challenge. (pp. 11-12)

This draws on the established and widely shared belief that the solution for addressing inequalities is 'boosting productivity, pay, jobs and living standards by growing the private sector, especially in those places where they are lagging'.¹ Implicit in this are two key assumptions: first, that wages from jobs are the prime driver of living standards; and second, that higher gross income on the top line of a pay slip means higher living standards. (p.12)

This report challenges and refutes these key assumptions by showing how complex forces play out to create liveability problems for individual households and districts in three low income areas. This analysis is policy relevant because it suggests that changes in central government tax and benefits policy alongside focused interventions by housing associations and other anchor institutions can help to increase liveability. (p.13)

Recently, the 'cost of living crisis' has presented an additional and serious threat to the living standards of an increasing proportion of households highlighting the need for a new policy agenda which makes low wages more liveable. (p.13)

The research study of household disposable and residual income in low income districts

The researchers were asked to explore 'the relationships between residual household income, employment and the barriers to taking up employment' and then the benefits from finding and taking up higher paid employment.

¹ White Paper: exec summary p.5 and paper p.192

Their focus is not on top line gross wages but on (a) disposable income after deduction of taxes and with addition of cash benefits and with (b) residual income after first order essentials of housing, utilities and transport costs have been paid for out of disposable income. Because what matters to households is not top line gross wages but what is left for them to spend (a) in disposable income and then in (b) residual income. Spending on food has to come out of this residual income so it is not a measure of what is available for discretionary spend. The current cost of living crisis is a crisis in residual income for poorer households facing worsening 'heating vs eating' dilemmas. (p.7)

The unit of analysis is the household not the individual because more than 85% of UK citizens live in multi-person households which share expenditure, and which often contain more than one wage earner. Household composition is a major driver of living standards when, for example, in the bottom three deciles both parents work in three-quarters of two parent households with children and single person households also over-represented. (p.13)

The area focus was on three low income urban districts in and around Newcastle upon Tyne, in the North East of England: Byker in inner city Newcastle; North Shields in North Tyneside; and Blyth on the Northumberland coast. All three districts were, by local standards, low income areas with average household gross incomes of between £26,000 and £32,000; by way of contrast, in the Tyneside conurbation, high income areas have average household gross incomes of between £50,000 and £55,000. (pp.17-18)

The study uses these areas as case studies to explore three connected questions related to the role of more and better paid jobs in 'levelling up'.

Q1: What is the relation between employment and residual household income for those who move from benefits to employment and from a low paid to a better paid job? (pp.18-19)

Q2: Are jobs accessible for low income households (given the limits of public transport and the expense of running a car)? (pp.19-20)

Q3: How does low residual income lead to stressed households and depressed districts? (pp.21-22)

The researchers approach these questions using a foundational framework where household liveability depends on three conditions: first, residual income after essentials have been paid for; second, access to quality foundational services like health and care; and third, social infrastructure which sustains sociability. The focus of this report is on the first of these conditions where the report shows that higher paid jobs will not on their own produce higher living standards in low income areas, where there are problems about household disposable and residual income. (pp.14-17)

In previous research we have shown that UK households with higher gross income do not necessarily have higher residual income because housing costs vary dramatically between different tenure groups of owners and renters in various regions. For example, private renters in London (with very high housing costs) start with a much higher gross income but after paying for housing end up with a lower residual income than outright owners in North East England (with very low housing costs). (p.16)

The implication of that earlier research is that regional averages of per capita income or product (as with GVA per capita) obscure complicated patterns of disadvantage which are explored at district level in this report.

The benefits system and tax and National Insurance deductions from pay

Q1: What is the relation between employment and residual household income for those who move from benefits to employment or from a low paid to a better paid job? (Introduction pp.18-19; Chapter 2 pp.23-34)

For any individual claimant, the move from benefits to any kind of paid employment results in a substantial 30% or more increase in gross income as the low paid get a wage plus Universal Credit (UC) wage subvention. This step up is designed into the benefits system by offering very low benefits. So that, as intended, UC provides a substantial incentive for an individual to take work compared with relying solely on benefits. (pp. 26-27)

The unfortunate direct corollary is very low living standards for more than 25% of all UC claimants in the Tyneside conurbation who receive benefits with 'no work requirement' because they are long term sick, disabled or carers. Any special needs payments do not alter this basic fact. This is a major issue in poor districts where expectation of healthy life is around 52 years, and many can expect years of ill health and disability before they draw an old age pension. (pp.28-29)

The poorly understood indirect result is a tax and benefits system which ensures that the benefits of higher gross pay (from more hours, pay award or a better job) translate into modest increases in disposable and residual income, for a household in a poor district where typical household gross income would be between £25,000 and £35,000 (from wages and UC). This is because under the UK tax and benefits system, taxes increase and benefits reduce as the gross income of the low paid increases. Income tax, national insurance and pension take 35p from every extra £1 of gross income; then UC benefit is reduced by 55p for every £1 of disposable income above the work allowance. (pp.30-31)

The result is a disposable income retention problem in low income, in-work households. For example, consider a household of social renters with two adults (one working full time and one part time) and two children, with a gross household income of £32,078. In this case, a 20% increase in the main, full time earner's wages turns into a 3.6% increase in disposable household income (after housing costs). An even higher increase - 40% - in the main earner's wages turns into a 7.2% increase in income on this basis. (pp. 32-33)

This kind of calculation highlights how the low paid face an effective marginal tax rate through tax and benefits of more than 80% (a rate that never applies to the high paid). It also overstates the retained income gains from employment because it does not take into account whether and how extra costs are incurred by those moving from unemployment into employment, or for those increasing their hours of employment or travelling further to a better job. If extra costs of transport or childcare are unavoidable, levels of residual household income are effectively even further eroded. (p.32)

For the low paid household, higher wages produce very modest increases in disposable income when price inflation is squeezing residual income through higher energy and other essential costs. The result will be hardship and social discontent because low income households would have to claim infeasibly large wage increases to get an increase in take home pay that compensates for rising prices. The dynamic for most is not a wage-price spiral led by wages but a partial price-wage catch-up led by escalating prices.

Transport disadvantage

Q2: Are jobs accessible for low-income households (given the limits of public transport and the expense of running a car)? (Introduction pp.19-20; Chapter 3 pp.34-46)

Standard answers to the question of what barriers exist to more or better jobs typically include: education and skill levels; cost of childcare (which in the UK is more expensive for median wage earners than in any large OECD country); and public transport infrastructure limits on the travel to work area. While all of these are indeed barriers, this study explored another barrier – job accessibility and the cost of commuting to work – which has been neglected by policy makers. (p.34)

Tyneside, like other conurbations, is a mosaic of job rich and job poor areas with residential districts increasingly separated from edge of town employment sites. For roughly half of Newcastle residents active travel or a short bus or Metro ride will take them to work; but the other half commute more than 3 kilometres to work and typically commute by car. (pp.36-38)

Transport disadvantage arises because those in job poor areas often have to spend a significant part of their income on public transport fares or the costs of running a car to access a job, because public transport comes with non-cash costs in terms of hassle and extra travelling time. Radial public transport systems make orbital journeys difficult or impossible and UK public transport fares are expensive because they are set to recover operating costs and minimise subsidies. The car is more convenient than public transport for many commuting journeys (especially as edge-of-town employment sites like business and retail parks have been designed around car access). (pp.39-41)

The car is, for middle and upper income groups, the universal tool which has offered access to jobs, shopping, family activities and leisure at an acceptable cost. For many low income households, running one car is costly but necessary to access work. Such enforced car ownership in late 2021 would have taken approximately £2,500-£3,000 out of disposable income after housing costs, which averages £19,000-£24,000 in our three low income areas. By mid-2022 the rising cost of petrol and diesel fuel had added an extra £500 per annum to that cost. (pp.40-41)

Urban topography around the residential district and travel to work distance is, therefore, an important complicating variable in setting the parameters of disadvantage. Some districts like inner city Byker benefit from good public transport connections while the coastal town of Blyth suffers from inconvenient and expensive bus connections to its adjacent employment pole at Cramlington, which is much more easily reached by car.

Then consider the dilemmas of low income social housing tenants in Newcastle. Roughly half of these tenants have no car, so they are effectively trapped in (a) proximity labour markets within a 3km radius of home or (b) corridor labour markets defined by which transport lines run through the district. Even with two incomes and social rents, most low income households can afford no more than one car and so have to make choices about which adult worker uses it. (pp.42-44)

The low income household's employment choices are often then gendered. Typically, the man takes the car to work in full time employment and the woman walks to work in the proximity labour market. In Newcastle, women account for 79% of part time workers and 76% of these female part time workers travel less than 5km to work. (p.43)

Even if public transport is available, however, its costs have risen in real inflation-adjusted terms much faster than the retail price index and average real wages. (pp.44-45)

The implication is that politicians, policy makers and the commentariat have underestimated the problem of making better paid jobs accessible to workers, overemphasising the extent to which skills upgrading alone will solve problems, particularly in and around the Newcastle city region where the available better jobs will often be outside the radius of active travel.

Place disadvantage and high streets

Q3: How does low residual income lead to stressed households and depressed districts? (Introduction pp.20-21; Chapter 4 pp.46-58)

The way that housing, tax and benefits, and transport policies play out in practice has had the effect of often concentrating stressed households with low residual income in inner city districts and isolated social housing estates. One of the unintended results is the depressed residential district with relatively few good jobs within active travel distance, and where a concentration of low income households results in a poor 'high street economy'. (p.46)

Residual household income for an average two wage earner household in Byker produces a gross income from wages and benefits of £29,200 and disposable income after tax of £24,700. First round essential costs for housing, transport and utilities represent three large deductions to leave residual household income. For those households requiring childcare, average costs in the North East are approximately the same as average social rents, reducing residual income further. Costs of utilities and transport are proportionately higher for lower income households, magnifying differences in average costs between low and higher income districts. (pp.47-50)

The unfolding cost of living crisis in 2022 is set against a backdrop of squeezed residual income. The two lowest income deciles spent 20-25% of their total household expenditure on just food and utilities. With energy prices pushing up utility bills by around 120% in 2022 (with more increases likely to come) and food price inflation running at 6.9% by April 2022, the lowest income households will be unable to manage through normal 'work-arounds' creating extreme crisis. More households in higher income deciles will also join the group struggling to sustain liveability as prices rise much faster than wages and benefits. (pp.51-53)

Lower income households tend to be concentrated in some districts. In Byker, 30% of households are on UC, which provides just 10% of all net household income in the district. Consequently, in this area the average gross income per household is £25,000-£35,000 and disposable income (after housing cost) is £19,000-£24,000. The relatively low level of disposable and residual income constrains the local economy and encloses households in a series of circular and self-reinforcing demand and supply side relations. (pp.54-55)

With respect to demand, the low level of effective local demand for goods and services reduces variety and contributes to downmarket supply. Consequently, residual income is often spent further afield in mid-market districts because even value chains like Iceland and Heron Foods do not locate in depressed districts; and few visitors come into the area from outside to buy goods and services because the retail and service offer is limited. (pp.55-56)

On the supply side, the restricted opportunities of the local labour market do not develop aptitude and foster capability. Under-employed workers are trapped (due to the transport constraints discussed) in an overstocked labour market which offers short and irregular hours at minimum pay, in a district whose cheap rents encourage in-migration by other low-income households. And all this is gendered so that it is always easy to recruit school dinner ladies who walk to work. (pp.55-56)

The outward and visible sign of the depressed district is the run-down high street economy. A substantial part of high street footfall normally comes from households within active travel distance. When these households have low residual income and (as in the UK case) the grocery spend has been captured by supermarkets, the result will be a high street dominated by pound shops, betting shops, cheap cafés and takeaways. (pp.53-55)

More and better jobs in Newcastle city centre or on the edge of the city, will not necessarily address or resolve this problem of a depressed district like Byker with its trapped lowest income tier residents. What is needed are supplementary policies which deal with district pockets of intense deprivation and address disadvantage. This can be done by engaging with the granular detail and specifics of people and places and breaking the downward spiral that contributes to depressed districts. (pp. 53-57)

Policy recommendations

More jobs and better paid jobs would be a good thing. But the broad argument of this report is that, under present conditions, the tax and benefits wedge and the costs of working would nullify the benefits of higher wages for many low paid workers. And better jobs are unlikely to happen on a large scale in the first half of the 2020s as the North East moves into recession after supply side shock; the record in the good years of the 2010s was high job churn and 26,000 net new jobs over the whole decade. (pp.28-30)

The policy priorities for liveability should be (a) improving access to employment for those excluded or competing in over stocked proximity labour markets and (b) making low wages more liveable, which involves foundational services and social infrastructure as well as income. (Introduction pp.21-22; and Chapter 5 pp.58-64)

Income is a powerful lever, but Westminster politicians are reluctant to undertake comprehensive reform of tax and benefits because they fear it would create many losers. However, they could improve living standards by reducing the UC taper rate on income for low income in-work households; and plan to lift carer, sickness and disability benefits and old age pensions in steps towards a living wage level of benefits (as Beveridge intended in 1942).

At regional and local level there are possibilities of constructive intervention for liveability by local actors like large public and private employers, and scope for place makers, like housing associations, and place connectors, like transport authorities. And that is so, even if they cannot shift the central government rules of the game which constrain the building of social housing, the subsidising of public transport and the funding of childcare. (pp.59-60)

Any local actor can make a difference. Thus, medium and large employers independently can develop targeted 'grow your own' policies for workforce development and retention which explicitly target depressed districts and the workers who get trapped in local labour markets. If employers, anchor institutions and local and regional authorities work together in alliances for change, they can do so much more. (pp.59-61)

Housing providers and other anchor institutions can contribute to build the capability of individuals and the liveability of households according to the nature of their service or production activity in a variety of ways.

- Regular weekly earnings initiatives. Going beyond a minimum number of hours per week/ no zero hours contracts towards arrangements like annualised hours which give the employer weekly flexibility, and the employee a regular wage which can underpin household budgeting. (p.60)
- Coordinated 'grow your own' employment initiatives, including targeted recruitment for apprenticeships and career pathways for older candidates with limited academic qualifications. All targeted-on individuals in depressed districts with measurement of the district results of collective effort. (p.61)
- Employability support to keep individuals in employment, including mentoring and specialist mental health support and enlistment of primary health care. (pp.59-60)
- Organisation of subsidised transport from residential areas with few jobs to key employer locations (e.g. retail parks and industrial sites); because cheap transport that suits shift patterns opens opportunity for those trapped in proximity labour markets. (pp. 63-64)
- Support for childcare outside school hours e.g. holiday clubs, after school activity clubs, recognising that part timers in low income households need childcare before they can work longer hours but cannot afford childcare from their low wages. (pp. 63-64)
- Hard and soft support by housing associations for their tenants. Not just rent moderation and increased hardship funds but initiatives of all kinds to deal practically, e.g., with the immediate winter heating problems of tenants in fuel poverty. (pp.61-62)
- Address food poverty by supplementing food bank services with more imaginative domestic economy initiatives like discount ingredient boxes, meal kits, and help with recipes and equipment like slow cookers etc. (p.64)
- Support the regeneration of high streets by coordinating anchor moves and relocations so that office workplaces and service points are as far as possible located on district high streets; prioritise up grading social infrastructure in social housing estates. (p.64)



Chapter 1. Introduction to the report

Over the last two decades policy makers in the major parties and economic experts have recognised that the economy is a machine that does not deliver good outcomes for many UK citizens. In response, many politicians and economists have argued that more jobs - and higher incomes from better jobs - are the generic fix to inequalities and insufficiencies of income at household and regional level. In 2022, the growing 'cost of living crisis' and the rising price of foundational essentials including energy, transport and food presents an additional and serious threat to the living standards of an increasing proportion of households, not simply those with the lowest incomes.

This is a report about living standards in low income urban districts in and around Newcastle upon Tyne in the North East of England. Byker in inner city Newcastle is about a mile and a half from the city centre and best known for its large Byker Wall social housing estate. The other two areas of study are low income areas in district towns with urban populations of around 35,000. North Shields is about eight miles from Newcastle city centre on the north side of the Tyne; while some 13 miles north east and semi-detached from the Tyneside conurbation, Blyth is a port town on the Northumberland coast.

This report addresses the political and expert belief that jobs, and higher paid jobs are the key to higher living standards in places like this, whilst the analysis shows that it is altogether more complicated. Available jobs may not be accessible to an unemployed or precariously employed individual because of carer responsibilities or travel to work costs. While for those who get a job or move to a better paid job, any gain in liveability depends on much more than the top line in their wage slip.

This report explains this complication in a way that sets the discussion of a 'cost of living crisis' in context. This crisis is real enough for all low income households. But acute recent developments like rising energy costs only aggravate ongoing chronic problems about issues like the cost of running a car for households who need one to get to work. Part of the problem here is a tax and benefits system for the low paid which operates to turn any large increase in gross income from wages into a much smaller increase in disposable income after taxes and benefits. This is even before housing, transport and utilities leave a slender margin as residual income.

In the first section of this introductory chapter, we establish how politicians and experts repeatedly oversimplify by emphasising jobs and better paid jobs as the key to living standards, before teasing out some of the complexities about the drivers of liveability.

1.1 From jobs to liveability

More and better paid jobs was the central theme in high level government strategy for recovery from the pandemic in that short period before recovery was derailed by the cost of living crisis and inflation. In May 2021, when beginning to think about the future after Covid, the Prime Minister argued 'we must use this opportunity to achieve a national recovery so that jabs, jabs, jabs becomes jobs, jobs, jobs'.² In summer 2021, as the government pivoted from furlough to recovery, it announced a Way to Work plan to get 500,000 into work, partly by insisting that those unemployed for more than a month would be compelled to take any job. The Work and Pension Secretary claimed that 'helping people get any job now, means they can get a better job and progress into a career'. More positively, the Chancellor insisted 'It's important that everyone has the opportunity and support to find a good job to help them get on in life'.³

² https://www.reuters.com/world/uk/queen-elizabeth-set-out-uk-governments-post-pandemic-agenda-2021-05-10/

³ Press release https://www.gov.uk/government/news/new-jobs-mission-to-get-500-000-into-work

This 'jobs as the fix' approach fits into a widely shared meta narrative about how the UK economy is or should be on a transition path from low wages, skills and productivity to high wages, skills and productivity. In his speech to the Conservative Party Conference in October 2021, Boris Johnson renounced 'the same old broken model with low wages, low growth, low skills and low productivity' and pointed towards 'the direction in which this country is going now, towards a high wage, high skill, high productivity, and yes, thereby a low tax economy.' ⁴

The Labour opposition endorses these priorities. Keir Starmer, the leader of the opposition, responded to Johnson's speech by accepting 'Britain needs a high wage, high productivity economy, but this government has no plan for getting there' ⁵. The Levelling Up White Paper of February 2022 ⁶ tried to bolster credibility by laying out a government plan for getting to a 'high tech, high skill, high wage economy', which would reduce the regional inequalities that disadvantage regions like the North East of England and cities like Newcastle.

The Levelling Up White Paper added a social wrapper about life expectancy, health inequalities and sense of community but, in addressing internal economic inequalities, it presented an orthodox economic analysis of problems and remedies. This overlapped with much of what the May Government had previously promoted as industrial strategy. The remedy for internal inequalities in the Levelling Up White Paper is 'boosting productivity, pay, jobs and living standards by growing the private sector, especially in those places where they are lagging'.⁷

Jobs are presented as the nexus which connects productivity, pay and living standards, which are all assumed to be closely correlated. Thus, the mission for 'living standards' by 2030 was simply more and better jobs because 'by 2030 employment and productivity will have risen in every area of the UK'. The White Paper recommended four policies for more jobs: easing credit constraints on SMEs, freeing up pension fund investment in infrastructure, diffusing innovative technologies and sectoral support for manufacturing.

Significantly, in response, the expert commentariat did not question any of the assertions about the jobs nexus connecting productivity, pay and living standards but again questioned whether there was a credible plan for achieving the outcome. In the Financial Times, Martin Wolf praised 'thorough analysis, clear aims and sensible policy steps' in what was 'a necessary call to arms', but then lamented that the resources of new money were too limited to deliver the ambitious goals ⁸. Will Hutton gave much the same verdict in The Guardian. He praised the first two thirds of the White Paper as 'among the best government analyses of Britain's economic and social failings', and then laments 'the last third of the paper demonstrates... the thinness of the government's planned response'.⁹

Circumstances change and the world has moved on into a 'cost of living crisis' since the Levelling Up White Paper was published early in 2022. The Ukraine War embeds higher prices for energy and food, spurring price inflation towards 10%, with inflation likely to stay high for the foreseeable future which almost certainly includes a major recession. Against a background of strikes by rail and other workers, the Conservative government was by summer 2022 resisting public sector worker demands for pay rises which compensated for past austerity and current price rises.

⁴ Boris Johnson, Party Conference Speech 6 October 2022 https://www.rev.com/blog/transcripts/boris-johnson-uk-conservative-partyconference-2021-speech-transcript

⁵ Keir Starmer, speech of 7 October 2022 https://labour.org.uk/press/keir-starmer-speaks-ahead-of-visit-to-british-food-manufacturing-site/

⁶ Department for Levelling Up, Housing and Communities Levelling Up. Levelling up the United Kingdom, February 2022, CP 605

⁷ White Paper: exec summary p.5 and paper p.192

⁸ https://www.ft.com/content/19c28c15-cd88-40b6-bd7a-15115b624ef5 6 Feb 2022

⁹ https://www.theguardian.com/commentisfree/2022/feb/19/this-may-come-as-a-surprise-but-i-think-the-tories-flagship-policy-is-exactly-right 19 Feb 2022

And yet, the relevance of the high wages and productivity goal was being reasserted by government ministers as they were pressing low wage settlements on public sector workers. After June 2022 by-election defeats, in an interview on the BBC Radio 4 Today programme, Deputy Prime Minister Dominic Raab was asked the government's direction of travel and plan for the economy and the cost of living. He replied 'the long term plan is a high wage, low unemployment economy which delivers the quality of life that people want.' ¹⁰

The more jobs and better jobs trope is endlessly re-worked because more and better jobs is apparently a self-evident economic good which is politically uncontroversial. Rewarding work fits easily into centre-right and centre-left political rhetoric and electoral strategy. Thus, Conservative George Osborne in 2013 justified tax and benefits reform as rewarding 'hard working people', while penalising undeserving claimants and reducing 'welfare dependency'¹¹. Claire Ainsley, the Labour Party's current director of policy, believes that her party can win elections by appealing to values of 'family, fairness, hard work and decency'. ¹²

More fundamental are two implicit and unchallenged assumptions which underlie the trope: first, that wages from jobs are the prime driver of living standards; and second, that higher gross income on the top line of a pay slip means higher living standards. Chapters 2, 3 and 4 of this report present detailed empirics which show that for households and districts the causal relations around income and living standards are altogether more complex. Here we develop our earlier argument about the importance of household residual income whose relevance is increased with the cost of living crisis. The unit of analysis is the household because most UK citizens live in households (not institutions ¹³). In 2021 there were an estimated 19.8 million multi-person households in the UK with 8.3 million living alone in single person households.¹⁴ Overall, of the 66.4 million UK citizens living in households, more than 85% live in multi-person households.¹⁵ Household structure is important because those living in multi-person households generally share household expenses which reduces the per capita burden of housing costs, utility bills and such like: and working age multi-person households can boost household resources by pooling the incomes of more than one wage earner. All this has major implications for living standards. For example, in three guarters of UK couples with children, both parents work; these households will benefit from expenditure sharing and income pooling compared with a single parent household with children.

There is then the separate issue of distinguishing between different levels of income. This has become more complicated over time as benefits have increasingly been paid to in-work as well as out of work households (as originally intended under Beveridge's welfare design and where child benefits were universal and usually paid to mothers). Analysing incomes for different kinds of households and at local level adds further complications due to the availability and consistency of data. It is generally useful to distinguish several kinds of income which are relevant to households: gross, disposable and residual income.

 Gross income includes wages and salaries for non-retired households, occupational pensions and investment income (from interest, dividends and rent), before deduction of taxes.¹⁶

¹⁰ https://www.bbc.co.uk/sounds/play/m0018h0w, BBC Today Programme, 24 June 2022, Nick Robinson interview with Dominic Raab at 8.19 am.

¹¹ https://www.politics.co.uk/comment-analysis/2013/04/02/george-osborne-welfare-speech-in-full/

¹² Ainsley, Claire (2018) The New Working Class

¹³ Those who do not live in households include those in residential care settings, student halls of residence (without a parental home in the UK), armed forces personnel in institutional living, hotels, prisons and hospitals.

¹⁴ Families and households - Office for National Statistics (ons.gov.uk) Table 5.

¹⁵ Families and households - Office for National Statistics (ons.gov.uk) Table 7.

¹⁶ In some official data series, gross income is defined slightly differently, and this will be noted.

 Disposable income is what remains after income has been reduced by deductions for income tax, national insurance and pension contributions and/or increased by cash benefits like Child Benefit, Universal Credit and state pensions.

This cash in/cash out measure of income gives an incomplete view of what the household gets from the state in return for paying tax, because it excludes the value of free and subsidised services like healthcare and education. As we shall see in chapter 2, these in-kind services are valued by the ONS at more than £13,000 per annum for a household in the bottom half of the income distribution, and this sum is consistently larger than the value of cash benefits per household.

Retained income is an altogether more complex concept because it is used in several different senses. In personal finance, residual income for a credit rating company is about the margin remaining after an individual has paid debts such as mortgage, car finance and credit cards. More generally, residual income is the margin remaining for discretionary spending after essentials have been paid. But what is included in the list of essentials is socio-culturally defined, changes over time, is contestable and varies by household composition. For example, if a smart phone is essential for everyday participation, what about broadband which many low income households do without because of its cost? Paid childcare is an essential for working households with young children and without access to reliable informal care, but these will be a minority of all households at any point in time. To simplify matters, in previous work and in this report, we use the following definition.

• Residual income is what remains of disposable income after the household has paid for the first order essentials of housing, utilities and transport.

Of these essentials, housing costs are the most significant, not only due to their size but also because they are highly variable by region and tenure (unlike utility costs or transport) and not covered by cash benefits in the majority of households.¹⁷ Therefore, it is also useful in some instances to consider income after housing costs, especially when looking at the impact of gross income changes for those households whose housing costs are covered by benefits.

 Disposable income after housing costs, which deducts the cost or rent or mortgage payments from disposable income.

It should be stressed that our measure of residual income is not a measure of what is available for discretionary spend because it excludes food and childcare costs. Even before the inflationary rise in food prices, through the late 2010s many low income households in the bottom three income deciles had no margin of discretionary spend and could not or could only just afford all the bare essentials. This report discusses how the 'cost of living crisis' in 2022 brings quite unmanageable increases in the cost of many essentials for stressed households.

If residual income is what is left after deduction of first order essentials (housing, transport and utilities) that definition is good enough to make two points. First, as we show in this report, given the tax and benefits system, many low income households have a long standing income retention problem so that substantially higher gross wages produce only a modest boost to household disposable income. Second, as we showed in previous research, households with higher gross income do not necessarily have higher residual income because average housing costs vary dramatically between different tenure groups of owners and renters in various regions.¹⁸

¹⁷ At some points in the report, we also use a measure of disposable income after housing costs to show how housing tenure and location affect household discretionary spending. This is relevant particularly for low income households where housing costs are partly or wholly covered by benefits; and where changes in wages income will have implications for the extent of that support.

¹⁸ Calafati, L. Froud, J. Haslam, C. Johal, S. Williams, K. (2020) Diversity in leading and laggard regions: living standards, residual income and regional policy, Cambridge Journal of Regions.

This important point is illustrated in exhibit 1.1 by comparing two substantial groups which, before the pandemic and the cost of living crisis, each account for 25% of all households in their region. Outright owners in North East England typically had very low housing costs on average, while private renters in London have very high housing costs: rent takes 34% of the disposable income of private renting London households with a mean income for the group.

Exhibit 1.1: Gross, disposable and residual income: comparison of NE England owner occupied and London private rented households¹⁹

| Mean household income in 2019 | Outright owner North East England | Private renter London | | |
|-------------------------------|--------------------------------------|--------------------------------------|--|--|
| - Gross | £33k | £52k | | |
| - Disposable | £30k | £41k | | |
| - Residual | £25k | £22k | | |
| Per capita residual income | £13.2k (1.9 persons per household) | £7.9k (2.9 persons per household) | | |

The average private renting household in London starts with a gross income more than 50% higher than the outright owner household in the North East. Higher taxes then reduce the gap in disposable income while higher cost of London housing not only closes the gap but also puts the North East outright owner fractionally ahead with an income of £25k. If we then factor in differences in household size, London private renting households are younger and contain more children. Overall, the residual per capita income of the London private renter at £7,900 is not much more than half that of the North East private owner of £13,200.

This simple example establishes the basic point about the limitation of gross income as an indicator of household and individual living standards; and that has some immediate implications. For example, the use of individual output figures like GVA per capita as measures of regional performance is likely to oversimplify a mosaic of variability in outcomes according to household composition and circumstance. But if the outcome is mosaic, we cannot replace one privileged indicator like individual gross income with another like household residual income. This leaves the question of how to understand the complexities of the drivers, processes and outcomes of the percolation of income in households and in districts.

In this report we work with a simple schema of the drivers of liveability at household and district level which brings out the complexities of process and outcomes. These complexities are briefly summarised below and then explored in greater detail in chapters 2, 3 and 4.

(1) On income from jobs, what matters to households is not top line gross income for the wage earner (or earners), but what is left after deductions to give: (a) disposable income i.e. gross income minus taxes and benefits; and (b) residual income after housing, transport and utilities costs.

Deductions from gross income are a long-standing major issue for low pay households who gain relatively little from increases in pay. The marginal rate of deduction is high because compulsory deductions (income tax, national insurance, pension) take 35p of the extra pound of gross income; and then the Universal Credit (UC) taper rate withdraws cash benefits at a rate of 55p for every extra pound of disposable income. With inflation, this taper rate will increasingly

¹⁹ This table is based on bespoke data from the ONS and relates to 2017. In this table gross income is after deduction of pension contributions. The data covers working age and retired households. Analysis is drawn from: Calafati, L. Froud, J. Haslam, C. Johal, S. Williams, K. (2020) Diversity in leading and laggard regions: living standards, residual income and regional policy, Cambridge Journal of Regions.

become a public policy issue as low pay workers try to obtain pay increases to help compensate for rising prices.

The issue of further deductions that erode residual income is already a critical public issue with the rise in energy prices. For example, the capped energy bill which was £1,500 for a typical 3-bedroom house in 2021 will on current predictions have risen to nearly £3,000 by autumn 2022. The older definition of fuel poverty was spending more than 10% of net income on energy²⁰. By this standard, millions of households will, by winter 2022-23, not only be in fuel poverty but also facing much higher prices for food and transport.

(2) Beyond wages there are the other drivers of liveability: (a) cash benefits from the state, which are important not just to the unwaged but to low wage households routinely claiming UC to cover rent and top up disposable income; and (b) benefits in kind through subsidised or free at point of use services like schooling and healthcare which keep us safe and civilised.

Beveridge envisaged social insurance cash payments would go to the unwaged, in old age or when earnings were interrupted. Since the 1980s, the UK has constructed a massive system of wage subvention which covers rents and tops up disposable income for most households below the median by more than £5k on average. Our analysis in chapter 2 of this report shows that low income households in decile 2 (the second lowest income decile) obtain cash benefits of £8k which account for nearly 50% of the value of their £17k disposable income.

If the rules about cash benefit entitlement are important to liveability for the waged, so is access to free or subsidised public services including health, care, education, free school meals, and public transport subsidies and concessions. Safe and civilised life for all in the bottom half of the income distribution depends on free or subsidised services whose imputed value is well over £10k for the average household in every decile below the median. Our analysis in chapter 2 of this report shows that in low income households in decile 2, the ONS imputed value of £16,000 for such services is close to the average post tax disposable income of £17,000.

(3) Liveability is not an outcome which can be obtained at single household level because it requires support in the locality or district. Individual and household sociability requires an infrastructure of facilities, whether parks and libraries or pubs, cafés and clubs, which provide free or low-cost activities, sustain social networks and build attachment to place.

The pejorative descriptor 'left behind places' simplifies and blurs the distinction between different kinds of places. Ex-mining communities, outlying social housing estates and seaside towns are all very different places. But in many of them there is a strong attachment to place. As in a deindustrialised North Wales valley where we found graduate returnees who were prepared to compromise on economic opportunity in return for community connection, though they still needed some kind of job and affordable housing to ensure liveability.²¹

Around 40% of the English population lives in the 11 major city regions,²² which are all a mosaic of varied districts with very different income levels. This is now complicated by mass automobility with live/ work disconnects between job rich and job poor districts that have been increasingly bridged by car commuting. As we will argue in this report, one of the unintended results is the depressed residential district with relatively few good jobs within active travel

²⁰ https://www.eas.org.uk/en/fuel-poverty-across-the-uk_50535/

²¹ A Way Ahead. Empowering Restanza in a Slate Valley. Available at: https://foundationaleconomycom.files.wordpress.com/2022/04/ restanza-english-version-as-of-7-feb-2022.pdf

²² https://www.gov.uk/government/publications/trend-deck-2021-urbanisation/trend-deck-2021-urbanisation#:~:text=In%202019%2C%20 56.3%20million%20people,in%20rural%20areas%20(17.1%25).

distance and where a concentration of low income households results in a poor 'high street economy'.

1.2 This research and its questions

Our study is about how this complex parallelogram of forces driving liveability plays out in three low income areas, with consequences for individual households and for districts. The study started from a brief to explore 'the relationships between residual household income, employment and the barriers to taking up employment, ²³ and then the benefits from finding and taking up higher paid employment'. Our desk research here is supplemented by some focus groups, organised by our research partners who had nominated the three low household income areas of study in and around the Tyneside conurbation.

The three study areas are defined so that they each cover two MSOAs (middle layer super output areas). These are the smallest areas for which the ONS provides standardised income data and MSOAs usually have between 5 and 15,000 people in 2-6,000 households. In Byker, one and a half miles from Newcastle city centre, the MSOAs are Byker and Heaton South. In the district town of North Shields, about eight miles from Newcastle city centre on the north side of the Tyne, we studied the MSOAs of Chirton and Percy Main. Some 13 miles north east in Northumberland, in the coastal town of Blyth we studied the MSOAs of Blyth Cowpen and Blyth Town.

All of these areas of study were, by local standards, low income MSOAs with average household gross incomes of between £26,000 and £32,000; by way of contrast in the Tyneside conurbation high income MSOAs have average household gross incomes of between £50,000 and £55,000. We drew on a range of official statistical sources including the 2011 census (and subsequent estimates), a wide range of ONS statistics and the series on UC claims. The research successively addressed and answered three questions in chapters 2, 3 and 4 of this report. In the paragraphs below we preview the findings of these chapters which set up the problem for policy intervention in chapter 5.

- What is the relation between employment and residual household income for those who move from benefits to employment, and from a low paid to a better paid job?

Chapter 2 explores how this relation is determined by the design of the tax and benefits system. Under Universal Credit, benefits are deliberately set low so as to incentivise employment; and the benefit system has been extended to subsidise low wage employment which has proliferated in the deregulated British labour market. The tax system is the result of frequent well-intentioned adjustments whose unintended effects is a system which is not progressive but flat rate across most income levels, and especially regressive for the bottom decile.

Modelling the effects of changes in income from benefits and employment is greatly complicated by the variety of household types and housing tenures. Over the past forty years the number of two earner households has increased with rising female participation, often in part time work. At the same time, the relative scale of social housing has decreased with a resulting substantial increase in more expensive private renting amongst poorer households. The researchers, therefore, had to model outcomes for a variety of differently placed example households before they could come to clear general conclusions.

The first of those conclusions is that Universal Credit does what its designers intended, insofar as there is a substantial incentive to work compared with relying solely on benefits. The UC

²³ UK CRF application form, UK CRF Application, p.6,

system of low benefits plus top ups for low wages ensures that, for any individual claimant, the move from benefits to paid employment results in a substantial increase in household income. In single individual and two adult households, the move into employment increases disposable income (before rent) by 30-60%, though there may be significant new costs incurred in taking up a job, including transport and childcare.

But the step-up effect from benefits to employment is produced by low benefit levels which means heavy costs in terms of very low incomes for more than a quarter of UC claimants in our three local authority areas who are on benefits 'with no work requirement' due to chronic sickness, disability or caring responsibilities. Historically, low benefits for all were justified by the belief that the categories of those not available for work included substantial numbers who could work if encouraged to do so and who could find jobs.

This belief has become increasingly implausible over the past decade. Benefits entitlement decisions and administration have discouraged long term dependence on benefits. If just over one fifth of non-retired households were still without work in the North East in 2019, that reflects issues about the local availability of jobs. Over the decade of the 2010s, in total just 26,000 net new jobs were created across the whole region; and there was positive net job creation in just 5 of the 11 years.

For the many who are in work, the tax and benefits system is perverse in its income effects for households in low income areas because a substantial increase in the wages of an individual earner translates into a negligible increase in retained household income. A society which places great faith in financial incentives is undermining the incentive to get and hold a better job through the tax and benefit system.

The explanation is simply that as income rises the low income household pays more tax and loses the benefit of UC wage subsidy. A £1 increase in an individual's gross pay turns into a 65p increase in disposable pay after income tax, national insurance and pension contributions. At the same time, UC is reduced by 55p for every £1 of disposable income above the work allowance. The inescapable logic of this system of deductions is that only a small fraction of higher wages comes through as retained household income for working households in our study area MSOAs.

Consider the income retention from higher wages problem in the case of a low income, inwork household of two adults (one full time and one part time) with two children, who are social renters earning £32,078, which is around (or above) the average household income in our low income MSOAs. A 20% increase in the main, full time earner's wages turns into a 3.6% increase in disposable household income (after housing costs); a 40% increase in these wages turns into a 7.2% increase in household income.

The implication is that it is overly simplistic to assume that higher wages will semi automatically produce significantly higher living standards. This problem is compounded with inflation on essential goods rising to 10% and expected to stay high for some time. Given the tax and benefits trap, It is unlikely that low paid workers will be able to obtain large increases in gross wages so as to protect household incomes which are being eroded by rising prices.

- Are jobs accessible for low income households (given the limits of public transport and the expense of running a car)?

What makes jobs inaccessible? There are a series of standard answers to the question: economic policy makers would emphasise skills and maybe transport infrastructure limits on the travel to work area; social policy makers would raise issues like the cost of childcare. And these points all have force when, for example, childcare in the UK is more expensive for median wage earners than in any other large OECD country.

In chapter 3 our research focuses on a driver of inaccessibility which has been neglected by policy makers. Tyneside, like other conurbations, is a mosaic of job rich and job poor areas with residential districts increasingly separated from monofunctional edge of town employment sites. For roughly half of Newcastle residents active travel or a short bus ride will take them to work; but the other half commute more than 5 kilometres to work, and typically commute by car.

Transport disadvantage arises because structural limitations of transport systems or connectivity make certain journeys difficult or impossible. Disadvantage can give rise to transport poverty, when households spend a significant part of their income on public transport fares or the costs of running a car to access a job.

Public transport is often less useful for orbital commuting journeys because rail, metro and bus systems are generally constructed to facilitate radial journeys in and out of the city centre; and the problem is aggravated when English public transport fares are set high to recover operating costs. The overall result is that the car is more convenient than public transport for many commuting journeys, especially as recently constructed edge-of-town employment sites like business and retail parks have been designed around car access.

The accident of urban topography around the residential district is then an important complicating variable in setting the parameters of disadvantage. Some districts like inner city Byker benefit from relatively good public transport connections, while the coastal town of Blyth suffers from inconvenient and expensive bus connections to its adjacent employment pole at Cramlington, which is much more easily reached by car.

For higher income households, the car is the universal tool which offers access to jobs, shopping, family activities and leisure at an acceptable cost. For low income households running a car takes a large slice out of retained income. On our calculations, before the current fuel price increases in 2021, running a 10-year-old hatchback took about £2,500 to £3,000 per year out of disposable income (after housing costs), which averages £19,000-£24,000 in our three low income study areas.

Then consider the dilemmas of low income social housing tenants in Newcastle. Roughly half these tenants have no car so they are effectively trapped in (a) proximity labour markets within a 3km radius of home or (b) corridor labour markets defined by the accident of which transport lines run through the district. Even with two incomes and social rents, low income households can only afford one car and so have to make choices about which adult worker takes the car.

The low income household's employment choices are then gendered. Typically, the man takes the car to work in full time employment and the woman walks to work in the proximity labour market. In Newcastle, women account for 79% of part time workers and 76% of part time workers who travel less than 5km to work are female.

The implication is that politicians, policy makers and the commentariat have underestimated the problem of making better paid jobs accessible to workers. Almost certainly they have overemphasised the extent to which skills upgrading will solve problems, particularly in and around the Newcastle city region where the available better jobs will often be outside the radius of active travel. There has been insufficient engagement with the dilemmas of the motoring poor whose distress will become more acute in a world where petrol prices are high and electric cars are expensive. Nor has there been enough attention paid to the larger dilemmas of society which cannot solve the problem of transport poverty by giving every low income household a car, when the Climate Change Committee recommends a reduction in miles travelled by car. Addressing the socio-economic problem of access to work needs to be part of a wider rethinking of mobility that also addresses ecological challenges.

- How does low residual income lead to stressed households and depressed districts?

This third question arises from our answers to the first two questions. Chapter 2 shows that a complex tax and benefits system weakened the link between higher wages and household living standards for in-work low income households. And chapter 3 explains that public policy has not addressed the dilemmas of the motoring poor in a society of automobility, when the cost of car ownership effectively prices many poorer households and second earners out of job access.

Taken together these observations challenge the central underlying assumption of mainstream policy making. Before and after levelling up, the assumption is that public policy is a benign and positive lever which aims to rectify the deficiencies of disadvantaged districts. In standard terms these would be described as 'multiply deprived districts' with their many resource and performance deficiencies listed.

On the contrary, our analysis of household incomes and commuting to work patterns suggest that public policy has contributed to, or not addressed, the problems of such districts by concentrating stressed households with low residual income in inner city districts and isolated social housing estates. From this perspective we might instead propose the concept of the depressed district whose mechanics are described in chapter 4.

The effects of a reliance on low pay, short hours and irregular work with UC top-up of wages are reinforced by a large number of households dependent solely on UC. In Byker, 30% of households are on UC, which provides just 10% of all net household income in the district. The MSOA's income characteristics for the district are then £25,000-£35,000 average gross income per household and disposable income of £19,000-£24,000.²⁴

This pattern is best understood as a closed circle which pathologically connects demand and supply side at local level. A deficiency of effective local demand for goods and services is associated with a high level of leakage onto external consumption and a limited capacity to draw in spend from outside. On the supply side, under employed workers, especially women, are trapped in an overstocked labour market which offers short and irregular hours at low pay in a district whose cheap rents encourage in-migration by other low income households.

The outward and visible sign of the depressed district is the run-down high street economy. From our work in Wales, we know that a substantial part of high street footfall comes from households within active travel distance. If these households have low residual income and (as in the UK) the grocery spend has been captured by supermarkets, the result will be a high street dominated by pound shops, betting shops, cheap cafés and takeaways.

There has been general concern about the condition of local high streets and puzzlement as to why well-meaning regeneration policies over several decades have failed to achieve very much. In our view, more and better jobs in Newcastle city centre or on the edge of the city, will not necessarily address or resolve this problem of a depressed district like Byker with its trapped lowest income tier residents.

The policies proposed in the 2022 White Paper may be necessary to levelling up but they

²⁴ These estimates are from the ONS series Income estimates for small areas, England and Wales for the financial year ending 2018. In this series, gross income includes the gross income of all members of the household plus income from benefits. Disposable income is after income tax, national insurance, council tax, pension contributions and maintenance payments.



are certainly not sufficient to deal with district pockets of intense deprivation. What is needed are supplementary policies which engage with the granular detail and specifics of people and places, which can get lost in the abstractions of mainstream thinking.

1.3 Policy interventions

More jobs and better wages are not enough because the aim of policy should be improved liveability. That depends on private consumption from income where the relevant issue is not gross wages but disposable and residual household income which are structured by the tax and benefits system and the availability of social housing. Liveability also depends on collective consumption in the form of foundational services like health and care and in the form of all kinds of social infrastructure which sustain sociability.

Chapter 5 recognises the complications in the pursuit of increased liveability when the UK has constructed a multi-level governance system that is massively centralised. In England, 91% of tax revenue is centrally raised; and the three devolved nations have limited powers of tax and spend ²⁵. English devolution to city regions is through mayors operating within a Treasury defined agenda about GVA growth and raising tax revenue to cover government spending in that city region.

In this frame, large scale tax reform at the centre is most likely blocked because of the political fear that it would create losers as well as winners. But the tax and benefits system is subject to frequent adjustments and there is no reason why tax thresholds and UC tapers cannot be reformed to improve income retention at the bottom end; nor why carers and those with disabilities should not be given a substantial uplift in benefit payments.

Beyond this, the good news is that at the regional and local level there are possibilities of intervention by local actors like large public and private employers. There is also scope for place makers, like housing associations, and place connectors, like transport authorities, to lead in helping to develop the devolution agenda and work in broader alliances for better liveability.

Responsible medium and large employers have a responsibility to develop targeted 'grow your own' policies for workforce development and retention which explicitly target depressed districts and the workers who get trapped in local labour markets. This requires proactive recruitment policies, the adjustment of working hours and ensuring transport access. And in the longer term, the opening of new training paths whereby those with aptitude and experience can gain the credentials to progress, as in the Welsh Health Boards, where a health care support worker can progress to registered nurse.

Beyond this, local stakeholders in place making and connection need to take the lead in pressing for relevant policies, like the expansion of the social housing stock and low fares on more frequent bus services. This is partly about mobilising the city regions to change the Treasury ground rules in two key respects.

- First, reforming the grant system which in England (but not in Wales or Scotland) incentivises the building of new affordable housing, not social housing at 50% of market rent.
- Second, shifting away from the principle that public transport must recover its operating costs, and recognising that public transport is a public good whose wider benefits depend on subsidised low bus fares plus public control of the timetable.

²⁵ https://www.instituteforgovernment.org.uk/explainers/tax-and-devolution

Chapter 2. More (and better paid) jobs are not enough for household liveability

In the previous chapter we saw how mainstream policy is based on the assumption that jobs are the key tool to address the liveability difficulties of British households, especially those at the lower end of the income distribution. In this chapter we consider how jobs - and better paid jobs - can generate liveability, focusing on low income households in Newcastle and its hinterland, such as those in Byker, Chirton, Percy Main and Blyth.

We start with some UK context on the significance of employability and employment in social and economic policy demands for more jobs and better jobs. We outline how the post-war social settlement and welfare morphed into a project for marketisation and workfare from the 1980s. Delivery of that project has been complicated, with the proliferation of low wage and precarious employment, while dual earner households have become increasingly common as female participation rates have grown from just over 50% in the 1970s to around 75%.

The outcomes are complex, and we focus on three key developments and their implications.

- The principle that 'work pays': moving from benefits into waged employment should raise household income substantially. However, under the Universal Credit (UC) system, this differential is obtained through keeping benefits at a low level, even for those with long term conditions and circumstances – such as those with disabilities and carers - which mean that they are unable to work. This creates liveability problems for a substantial group.
- 2. The wages from low paid jobs (especially with short or irregular hours) do not sustain liveability, hence the need for large scale wage subvention as households claim housing benefit for rents plus income support in cash. This pushes dependence on the state for liveability beyond universal health and education well up the income distribution.
- 3. Better paid jobs at the bottom of the income distribution bring relatively limited income benefit to households because higher taxes and reduced cash benefits take more than 80p in every extra pound of household income. Well before the current cost of living crisis, disposable income after tax and benefits was being squeezed by the tax and benefits system.

The analysis shows the limits of mainstream assumptions. Politicians and economists call for employability to get individuals into work and better jobs for the low paid. But in a low wage society with large demands for wage subvention, jobs and better jobs are not the only or the main levers for improved liveability for many low income households. Other considerations like the design of cash-based income support systems, the interaction of tax and benefits systems and access to public goods and services are all as or more important.

2.1 The problematic UK shift to marketisation and workfare with the proliferation of low wage employment

Since 1979, under both Conservative and Labour Governments, there was a shift away from the post-war settlement to a project with the double objective of marketisation of public service delivery and reworking welfare benefits. The core of the benefits project, which commentators often refer to as workfare, was to provide strong incentives to work with the ambition that income from wages should play a much more central role in household liveability. This transition in thinking and policy is summarised in exhibit 2.1 which outlines key features with supporting empirics.

In the social settlement of the post-war period, household liveability across place and society resulted from the alignment of three elements: a) high wage industrial employment for (mainly) male heads of household; (b) a Beveridge-style plan for a 'living wage' standard for all the unwaged through subsistence benefits for the old, sick and unemployed; (c) generous provision of social housing, schooling and healthcare conceived as public goods, with education and healthcare free at the point of use. The settlement was frayed by the retreat from Beveridge's ambition to pay high benefits in 1954. It then collapsed from the 1980s with the uncompetitiveness of British manufacturing against Germany and Japan, and later the rise of low wage Asian producers.

In the marketisation and workfare response, the key assumption was that a post-industrial service economy in the UK could create large numbers of high wage jobs and that wages would be a more important driver of household liveability. This was set in a larger marketised context with an increased role for formal childcare, owner occupancy and private renting. Free to access public goods like healthcare and schooling would be provided but welfare would be effectively redefined as workfare, with low benefits subject to conditionality and sanctions to incentivise individuals to take an available job.

As politicians and economists recognise, the ambition of the marketisation and workfare project has not been realised. A flexibilised labour market in the private sector and an expansion of state funded schooling and health has generated jobs, though many of the new jobs were tax funded in the state and (privately operated) para-state sectors like care. Together the state and para-state sectors accounted for 57% of all jobs created in the heyday of economic growth under New Labour between 1998 and 2007 ²⁶.

More fundamentally, while a flexibilised labour market created jobs and unemployment rates were below those in some other European countries, including France and Spain, many of the jobs were low paid, so the primary condition for the success of the post-industrial liveability project was not empirically satisfied. By 2021, 14.2% of all UK jobs were classified as low (hourly) pay, with rates less than two-thirds of median hourly earnings, and 90% of these low pay jobs were at the minimum wage. If we turn from hourly rates to weekly wages, which are the critical indicator for liveability, 25.5% of jobs were classified as low paid on the basis of gross weekly earnings because they do not offer enough hours ²⁷.



26 'State' is defined as activities that are publicly funded and provided; 'para-state' is defined as activities where a substantial amount of funding comes from the state, but services are provided by non-state operators. For more details see: https://hummedia.manchester. ac.uk/institutes/cresc/workingpapers/wp75.pdf p.19.

27 The introduction and subsequent increase in the hourly minimum wage has increased pay rates at the bottom but, as the Resolution Foundation note, the problem of low pay for living standards is increasingly one shaped by 'insufficiency of hours', with 16% of those in low weekly pay wanting to work more hours. Hence the discrepancy between low pay on the basis of hourly rate vs. weekly earnings. Low Pay Britain 2021 • Resolution Foundation

Exhibit 2.1: From social settlement to muddled outcomes in the UK

| | Post-war British social settlement 1950s-1970s | Marketisation and workfare ambition 1979-2010 | British workfare and marketisation outcomes 2020s |
|------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Wage income from employment | Male bread winner in high wage, full time job with 5.9 million men in manufacturing in 1951²⁸ Low female participation of 35% with around 20% of married women regularly working in 1951²⁹ | Assumption that post- industrial economy and flexibilised labour market could create large numbers of high wage jobs (High wages will underpin high male and female participation, independent households and market choice) | Dual income household with 79% male and 72% female participation in 2021³⁰ Many low pay, precarious, part time jobs in services like retail, hospitality and care (38% of women's jobs are part time) 26% of jobs are low paid based on gross weekly earnings; 90% of low paid jobs are minimum wage³¹ |
| Social benefits and income support | Insurance benefits for unwaged i.e. old, sick, cyclically unemployed Beveridge 1942 plan for flat rate benefits covering all necessities; wives covered via husband's contribution | Redesign benefit levels and conditionality to incentivise work force participation Low benefits for the employable; defined to include many on sickness benefit | Increased dependence of low wage households on income support and housing benefit: by 2024 33% of working age households will be on UC ³² UC low benefits for out of work also apply to long term sick and carers; conditionality and sanctions a key feature³³ |
| Provision of public goods (housing, education, healthcare) | Extensive provision of public goods: free at point of use schooling + NHS health care Social housing for 35% of population at peak in 1970s³⁴ Women as unpaid house keepers, child carers | Public goods provision less important after marketisation More home ownership + private renting as households choose how to spend incomes on the market | Underfunded public goods: schooling, health and care services stressed Formal childcare used by 62% of households with children 0-14 in term time Households in social housing now falling towards 15%³⁵ after right to buy with limited new build ³⁶ |
| Outcome | A working public service state supporting/ funded by high wages via PAYE + National Insurance Expanded state has up to 40% share of GDP Male-centred society | Diffused economic welfare for independent households: GDP/GVA per capita measures High mass private consumption with less social spend, low taxes and lower state share of GDP | Divided society (before current cost of living crisis) with many state-dependent households and squeezed residual incomes (after rent, transport + utilities) High state share of GDP with flat and regressive tax system but the state cannot deliver public services which households need and expect |

28 Keynes, Beveridge and Beyond, table 3.9 p. 81

29 British Labour Statistics Historical Abstract

30 https://researchbriefings.files.parliament.uk/documents/SN06838/SN06838.pdf

31 https://www.resolutionfoundation.org/publications/low-pay-britain-2021/#:~:text=In%202020%20the%20proportion%20of,crisis%20 than%20higher%20paid%20worker

32 https://ifs.org.uk/publications/14083

33 Watts et al (2014) pp.2-3 Welfare-conditionality-UK-Summary.pdf (jrf.org.uk)

34 IFS 2015 p 8 https://ifs.org.uk/uploads/publications/bns/BN178.pdf#page=9

35 https://www.statista.com/statistics/286509/england-number-of-social-rented-households/

36 https://www.statista.com/statistics/286509/england-number-of-social-rented-households/

The outcome, after the period of austerity under the 2010-15 Coalition Government, has been an incoherent set of demands on the state, including an expectation of improved public service provision in health, education and care, while also funding cash and benefits support for low wage working households. By 2021, total tax receipts were 37% of GDP (and expected to rise further), an increase from the late 1990s³⁷. All this is in the context of a divided society with sharp contrasts between the comfort of high income households and employment based precarity for 30% or more of households at the bottom of the income distribution.

From this, it is not clear that more and/or better paid jobs will offer a sustainable solution to the problem of liveability. What has been created through well-meaning reforms is a whole series of interrelated problems which undermine household liveability and incidentally severely limit the benefit of better paid jobs in terms of disposable income. These problems are analysed in the next sections of this chapter.

2.2 A move into work from not working can substantially increase household disposable income. But the collateral damage is low benefits for the sick and carers who cannot work

In line with workfare thinking, the current benefits system offers a substantial financial incentive to work, with a big step up in household income when individuals move from benefits to employment. The step up is substantial even when considering low paid jobs at the bottom of the income distribution. In context, it can mean moving up from the poorest decile in the UK with average annual net household income of £20,000 a year in 2018-19; to the second poorest decile with average net household income of £33,000 a year.

For example, a two adult, two child household in a socially rented property in Byker or Percy Main with neither adult working, receives a total income of £20,292 per annum in Universal Credit, Child Benefit and Council Tax Credit. If both adults move to low pay employment (typical entry level positions) with one adult working full time and the other part time, the disposable income (after housing costs) increases by 58% to £32,078 per year, after adjustments to benefits.

As we show in exhibit 2.2, the result is not specific to this type of household or type of tenure. The income increase from benefits to employment is substantial also for households in private rented housing and for other types of households, such as that with a single adult. For example, a single adult in private rented accommodation would see their disposable income after taxes, benefits and housing costs increase from £10,014 to £13,550 if they started a full time low paid job, a gain of just over one third. The disposable income is higher for private renters compared to social renters in these illustrations because private rent is typically around 50% higher and, therefore, benefits paid are greater for these households. Appendix 1 contains the full details of the changes to disposable income for each of the four illustrative households in exhibit 2.2.

³⁷ Keep, M. (2021) Tax Statistics: an overview, House of Commons Library CBP – 8513 https://commonslibrary.parliament.uk/researchbriefings/cbp-8513/#:~:text=UK%20government%20raises%20around%20%C2%A3,economy%2C%20as%20measured%20by%20GDP.

Exhibit 2.2: Increases in disposable income (after housing costs) resulting from moving from looking for work to employment for different types of households and tenure in postcode NE6 1AA³⁸

| | Single adult ho | ousehold | 2 adults, 2 chil household | dren | |
|------------------------------------------------------------------------------------------------------------------------|-----------------|----------------|-------------------------------|----------------|--|
| | Social renter | Private renter | Social renter | Private renter | |
| • Disposable income after housing costs when unemployed and all adults looking for work | £8,295.56 | £10,013.64 | £20,292.48 | £21,402.16 | |
| • Disposable income after housing costs in (low paid) work after adjustments to taxes and benefits ³⁹ | £11,839.36 | £13,550.16 | £32,078.12 | £34,378.08 | |
| Total increase in disposable income after housing costs after starting working | £3,543.80 | £3,536.52 | £11,785.64 | £12,975.92 | |
| % increase in disposable income after housing costs after starting working | 43% | 35.3% | 58% | 61% | |

Of course, these illustrative numbers do not engage with various practical and financial implications that are relevant to claimants who find a job. Many low waged households experience irregular hours, and some jobs are temporary or otherwise insecure: all of this will complicate the impact on benefits and disposable income. From a practical point of view, although UC is intended to help smooth transitions into work, irregular hours can lead to complications in terms of making new UC claims and understanding how entitlements (such as Council Tax relief) may be affected with each change in employment status. Delays to payments can also be problematic for households with low savings.

Uncertainty about whether and how much better off a household would be through the change in work status, especially for a job with low pay or limited hours, is also complicated by additional costs incurred through working, which are not factored into exhibit 2.2. These are chiefly the costs of travel and childcare, which are explored later in this report. From the perspective of the household the quotes in Panel 1 from focus groups in our study areas illustrate some of these uncertainties.

Panel 1: Does getting a job pay?

Does getting a job pay?

- · 'Often going to work leaves you worse off'
- 'By the time you pay for travel, childcare, work clothes and your lunch, you are worse off'
- '...the cost of living this is a barrier, can you afford to go to work?'
- '...leaving Universal Credit, budgeting concerns over when and how often you get paid, the timespan between benefit and your first payment'

The implication of the growth of low waged employment is that the incentive to work can only be maintained by setting benefits paid to those not working at low levels. However, this has

³⁸ NE6 1AA is in Byker, Newcastle upon Tyne. Source: Derived from data provided by Turn2Us https://benefits-calculator.turn2us.org.uk/. This table measures disposable income after housing costs and council tax credits.

³⁹ Note: the calculations here assume part-time hourly pay of \pounds 9.01 and full-time hourly pay of \pounds 10.16 .

liveability consequences for those unable to work, for example, due to long term illness or caring responsibilities, as well as for those who are involuntarily unemployed and seeking work.⁴⁰ Some UC claimants are entitled to extra payments, for severe disability or because they are approaching end of life, though this does not alter the basic point about miserably low benefits.

The group of those receiving UC who are not available to work is a significant proportion of the total recipients of this benefit. For example, in the Newcastle upon Tyne local authority area in 2020 some 27% of UC claimants who are not in work are classified as with 'no work requirements' because they have met conditions related to chronic sickness, disability or caring responsibilities⁴¹. In the Northumberland and North Tyneside local authorities, the proportions are respectively 21.3% and 25.3%.

Overall, the number of households where members are of working age (16-64) and in which no one is working has fallen significantly across the UK (exhibit 2.3). The extent of the fall varies considerably by nation and region: in England the reduction is from 20.2% in 1996 to 12.8% in 2019; in Wales and Scotland the reductions are similar, starting from a higher base of workless households. Outside of London, North East England had the highest proportion of workless households (26.2%) in 1996 and this remains the highest though it has fallen to 21.2% by 2019.

The reasons why some households have members who do not work are many and complex, but one factor is the ability of the local labour market to create jobs. Over the period 2010 to 2020, some 2.7 million net jobs were created in England, Scotland and Wales⁴². The patterns of job creation and loss varies cyclically over this 10-year period, with 2010 and 2020 both years where there was a net loss of jobs and relatively large net gains in 2014 and 2015. Many of these jobs were created in London: some 998,825 net new jobs were created between 2010 and 2020, representing around 37% of all net new jobs created in Britain. The relatively low levels of job creation in the North East help explain the higher levels of workless households in this region, shown in exhibit 2.3.



Exhibit 2.3: Workless households in the UK, 1996 and 2019⁴³

40 For example, the New Economic Foundation shows that benefits levels for those claimants who are out of work have fallen significantly since 2010 https://neweconomics.org/2021/02/social-security-2010-comparison; see also the Resolution Foundation's review of a decade of changes to the social security system https://www.resolutionfoundation.org/publications/the-shifting-shape-of-social-security/

- 41 Department of Work and Pension, Stat-Xplore database [accessed 22-12-2021]
- 42 Derived from BRES, Nomis.

43 Households by region and combined economic activity status of household members: Table C, ONS https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/datasets/ workingandworklesshouseholdstablechouseholdsbyregionandcombinedeconomicactivitystatusofhouseholdmembers Note: We compute net new jobs by calculating annual change in employment in each of the 729 5-digit SIC classes and then summating all the year-on-year changes. This is an under-estimation of the dynamic conditions operating in the labour market as it will not register those who changed jobs in the year but stayed in the same sector. Also, in 2015/16 there is a change in the data collection to include PAYE establishments. The overall effect is modest. A total of 26,250 net new jobs were created in the North East of England between 2010 and 2020 (exhibit 2.4), a tiny proportion of those created at a national level. There is positive job creation in 5 of the 11 years in exhibit 2.4; in contrast, in England as a whole there is net positive growth in 9 of the 11 years. This data has several implications. First, there is a shortage of new jobs created in the North East and this will make it more difficult for those seeking work; there is considerable churning of jobs and, in many years, there are not enough new jobs to replace those lost, let alone allow an overall reduction in workless households. Second, the turnover of jobs creates problems for affected households navigating benefit systems and moving in and out of work. Households losing jobs may find replacement work though it may not have the same pay and conditions, or it may be less convenient. We return to the question of the spatial location of employment in the next chapter.





2.3 The wages from low paid jobs do not sustain household liveability because they require wage subsidy through direct cash benefits.Household dependence on state subvention extends well up the income distribution

The proliferation of low paid and insecure jobs in the UK ⁴⁵ has created a chronic situation whereby households at the bottom of the income distribution have difficulty sustaining liveability, even when they have managed to find work. The overall fiscal cost of wage subvention, via Universal Credit to support household incomes for those on low pay, inevitably has consequences for the availability of funding of public services including health, education, care, transport and social infrastructure, which also contribute to liveability.

⁴⁴ Derived from the Business Register and Employment Survey (BRES). Note: Break in series between 2015 and 2016 when PAYE but not VAT register businesses were included in the count. The counts are an understatement because the approach used does not register those who switched jobs but stayed within the SIC group.

⁴⁵ The Resolution Foundation estimated that two-thirds of the growth of employment between 2008 and 2018 has been in 'atypical' roles, including self-employment, zero hours contracts or agency work. Clarke, S. and Cominetti, N. (2019) Setting the record straight: How record employment has changed the UK https://www.resolutionfoundation.org/publications/setting-the-record-straight-how-recordemployment-has-changed-the-uk/

Note: 'Workless households are households where no one aged 16 years or over is in employment. These members may be unemployed or economically inactive. Economically inactive members may be unavailable to work because of family commitments, retirement or study, or sickness or disability,' ONS. Working and workless households in the UK - Office for National Statistics (ons.gov.uk).

As outlined at the beginning of this chapter, the main sources of household liveability are:

- a) Income from wages (and wage-related sources such as pensions) which enables the household to buy goods and services;
- b) Direct cash benefits from the state like Universal Credit which enable the household to buy goods and services and/or other state benefits which reduce the cost of services; and
- c) Access to tax funded public services (like healthcare, subsidised public transport, education) either at no cost and according to need or at a reduced charge, and defined as 'benefits in kind' in official statistics. ⁴⁶

Exhibit 2.5: Sources of income for liveability and their financial value at the bottom of the income distribution, 2019/20 (non-retired households) ⁴⁷

| | Decil | e 1 | Decil | e 2 | Decil | e 3 | Decile | e 4 | Decil | e 5 |
|-----------------------------------------------------------------------------------|---------|------|---------|------|---------|------|---------|------|---------|------|
| | £ | % | £ | % | £ | % | £ | % | £ | % |
| Post-tax income from wages and related sources | £6,994 | 26% | £17,338 | 42% | £22,507 | 52% | £27,308 | 58% | £31,278 | 63% |
| Value of cash benefits from the state | £5,793 | 22% | £8,087 | 19% | £7,431 | 17% | £6,059 | 13% | £4,886 | 10% |
| Value of benefits in kind (NHS, travel subsidy, education, childcare etc | £13,918 | 52% | £16,085 | 39% | £13,566 | 31% | £13,977 | 30% | £13,523 | 27% |
| Total income underpinning household liveability | £26,705 | 100% | £41,510 | 100% | £43,504 | 100% | £47,344 | 100% | £49,687 | 100% |

We can put (actual and imputed) cash values on each of these different sources of income for 2019/20 for non-retired households where at least one member is working. When we do that, we see that income from wages is only a very partial support of liveability in both low income and middle income households (exhibit 2.5). In particular, substantial wage-supplementing cash benefits go not just to the poorest households in the bottom three income deciles but also to middle income households in deciles four and five, reflecting widespread low wages. While the dependence on tax funded public provision is overwhelming in low income families, it is still significant for middle income groups in deciles 4 and 5. ⁴⁸

 For example, a household in the lowest income decile (decile 1) which has a net annual income of £12,787 from a combination of wages, pension and cash benefits also receives support in kind of almost £14,000 in terms of access to public services. Of the total financial value (income plus cash benefits and benefits in kind) of £26,705, only 26% comes from wages and related sources.

⁴⁶ Benefits in Kind are those that can be allocated directly to the household. This category includes the National Health Service (NHS), state education, adult social care, school meals and Healthy Start vouchers (including nursery milk and school milk, universal infant free school meals in England, free school meals for children in primary 1 to 3 in Scotland and the provision of free breakfast to all pupils in maintained primary schools in Wales), housing, railway travel and bus travel subsidies (including concessionary fare schemes). Expenditure where there is no basis for allocation in terms of use to each household are excluded e.g. defence, public safety, police etc. (Source: The effects of taxes and benefits on household income, technical report: financial year ending 2019, ONS. The effects of taxes and benefits on household statistics (ons.gov.uk)). Households are arranged into ten deciles or equal sized groups, each including 10% of all households, where decile 1 contains the 10% of households with the lowest income and decile 10 includes the 10% of households with the highest income.

⁴⁷ The Effects of Taxes and Benefits on Household Income, UK, 2019/20 - Reference Tables, ONS Effects of taxes and benefits on UK household income - Office for National Statistics (ons.gov.uk). This data covers non-retired households where at least one member is working to show the relative significance of different sources of income. Post-tax income in this series includes wages, salaries, investment income and also deducts indirect as well as direct taxes.

⁴⁸ Appendix 2 extends exhibit 2.5 over the whole of the income range.

- For a household in the third lowest income decile (decile 3), around half of the total financial value £22,507 out of £43,504 is from employment. Direct cash benefits are a smaller share of the total in decile three, though they still account for 17% and it is clear that the state underpins liveability for households at this level both directly through benefits and indirectly through provision of public services.
- In the middle of the income distribution, a household in decile 5 derives more than 60% of its total imputed income from employment, though direct cash benefits (10%) and benefits in kind (27%) together make a significant contribution to liveability.

2.4 A tax and benefits system that undermines individual incentives for, and rewards from, a better paid job. Better paid jobs bring limited net income benefits for low income households

The UK tax and benefits system is highly complicated and includes some elements that are progressive and some that are regressive in relation to income levels. The combined effect of changes in taxes and/ or benefits for any particular household will partly depend on individual circumstances. This includes the starting point, in terms of the relative levels of different sources of income, and the size and composition of the household. For example, what is the effect on disposable income for a low income working household which is able to increase gross income through a better paid job and/or from more hours worked?

The nature and size of the rewards from a better paid job is complicated by the way that working households in the bottom third of the income distribution derive significant amounts of their disposable income from cash benefits, as shown in exhibit 2.5. The extent to which increases in gross income are offset by reductions in benefits and/or higher taxes is critical to the outcome for disposable income. Overall, the UK tax and benefit system imposes high marginal rates of loss on additional income for lower income households. Households where members earn above the income tax and national insurance thresholds – typically in household income decile 2 or 3, depending on household composition - will lose around 35p in the pound for tax, national insurance and compulsory pension contributions. The extent of the withdrawal of benefits depends on the Universal Credit taper rate which is currently 55p from every pound of disposable post tax income above an individual's work allowance⁴⁹. That allowance is currently set low at £557 for those not receiving any housing allowance and £335 for those receiving an UC housing payment.

Under these current parameters, we can consider the impact on disposable income of an increase in gross income. Let us take as an example a low income household with two adults and two children in a socially rented property with a disposable income after benefits and taxes of £32,078 a year (exhibit 2.6); this is the same household included in exhibit 2.1 earlier in this chapter where both adults move into work. Having secured significant financial rewards after taking a job, a 20% increase in the main earner's gross income would translate into only a 3.6% increase in disposable income (after housing costs), after the impact of a reduction of benefits including Council Tax credit and increase in income tax, national insurance and pension contributions ⁵⁰. A substantial 40% increase in the main earner's gross income translates into a 7.2% increase in disposable income. Even an exceptionally large increase of 80% in the income of the main earner translates into only a 14.4% increase in disposable income after housing costs, which means just £86.60 more per week for the household of four. ⁵¹

⁴⁹ The taper rate was reduced from 63p to 55p in the Autumn 2021 Statement https://commonslibrary.parliament.uk/reducing-the-universalcredit-taper-rate-and-the-effect-on-incomes/; https://www.gov.uk/government/publications/universal-credit-work-allowances/universalcredit-work-allowances

⁵⁰ In this illustration we include a 4% deduction for pension contributions.

⁵¹ Appendix 3 provides the detailed working for these illustrative households.

Exhibit 2.6: Increases in gross income and disposable income (after housing costs) illustration for four types of household with starting income at the bottom of the distribution ⁵²

| | Increase in dispos single adult hou | able income for a usehold in work | Increase in disposable income for 2 adults in work and 2 child household ⁵³ | | |
|-------------------------------|---------------------------------------------------------------------------|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------|--------------------------------------------------------------|--|
| | Social renter ⁵⁴ (starting disposable income £11,839) | Private renter ⁵⁵ (starting disposable income £13,550) | Social renter (starting disposable income £32,078) | Private renter (starting disposable income £34,378) | |
| 20% gross income increase | 2.8% | 2.4% | 3.6% | 3.4% | |
| 40% gross income increase | 8.2% | 7.1% | 7.2% | 6.7% | |
| 60% gross income increase | 14.2% | 12.4% | 10.8% | 10.1% | |
| 80% gross income increase | 17.1% | 15.0% | 14.4% | 13.4% | |
| 100% gross income increase | 25.6% | 19.0% | 20.2% | 16.8% | |

As we move to other types of households and tenure the problem of poor retention remains, although with minor variations. For example, for the same proportionate increases in gross income, households that are privately renting will retain a smaller share than those that are socially renting; and the gap gets larger for relatively larger increases in gross income. Overall, relatively substantial increases in gross income translate into limited increases in disposable income because direct benefits diminish, and taxation rises. For the lower income household, this reduces the incentive to find a better job with more pay and/ or more hours, especially if the better job involves more travel time or cost, or requires greater need for childcare.

This kind of calculation highlights how the operation of the tax and benefits system means that the low paid live with an effective marginal tax rate of more than 80% (which never applies to the high paid). It also often overstates the retained income gains from employment because it does not take into account whether and how extra costs are incurred by those moving from no employment into employment, or for those increasing their hours of employment or travelling further to a better job. If extra costs of transport or childcare are unavoidable, levels of retained household income are effectively further eroded. For a lower income household, this reduces the incentive to find a better job with more pay and/ or more hours.

⁵² Source: Derived from HMRC for tax and National Insurance thresholds and Turn2Us for Universal Credit, Child Benefit and Council Tax data (https://www.turn2us.org.uk/). Universal Credit data accessed in May 2022.

Note: See appendix 3 for more detailed information on the calculations. Disposable income after housing costs is presented because as low income households gain more income from work, this will affect their entitlement to benefits that cover housing costs and Council Tax rebates.

⁵³ Children are 11 years old and have separate bedrooms

⁵⁴ Social renter refers to renting from a Registered Social Landlord (RSL). In this case, from the local authority. Typically, rents are lower than private renting.

⁵⁵ Private renter where the landlord is not an RSL. The private renter's take-home income is higher because their higher rent means that they receive more benefits.

2.5 Conclusion

As we have seen, moving into employment or finding a better job is at the core of current British social and economic policy. However, against a background of low wages, marketisation of public services including social housing and attempts to reward work through the benefits system, the outcomes have been mixed and complicated, as we have illustrated in this chapter.

Our analysis shows that income from employment is an important driver of increased liveability when households move into work. Even in the first income decile (which includes many unwaged families), income from wages accounts for more than 25% of the financial value of all support; and this grows as we move up the income distribution so that by the third decile, income from wages accounts for just over half the value of all financial support for household liveability. At the same time, waged income from work is neither the only nor the main source of liveability of in-work, low income households. In a low wage economy, the better part of half British households (most of which have members who are working) are also heavily dependent on direct cash benefits from the state and on access to public services such as healthcare and education.

Even more striking, higher wages from a better paid job have little positive effect on the living standards of a low income household. It seems reasonable that, as income increases, the household should lose benefits and pay higher taxes. But in the UK, even after recent budget changes to support low wage households, the parameters around increased tax and reduced benefits are set so that marginal rates of gross income loss are very high. Even substantial increases in pay translate into negligible increases in disposable income in relative and absolute terms. In a low income household of four a substantial 80% increase in gross income translates into an additional £39 per week of disposable income, after housing costs, for a single person household or £44 per adult in a household with two young children.

The policy shift towards marketisation and workfare outlined in the first part of this chapter has disappointed fundamentally because the economy has not produced large numbers of high wage jobs. In the North East of England the problem is creating any kind of job when the regional level of net job creation has been much less than in the country as a whole. If policy is to address the liveability crisis of low and, increasingly, middle income households it must think not only about (more) better jobs and higher wages but also about the design of the tax and benefits system and access to public services. These themes will be further explored in chapter 4, but before that we turn in chapter 3 to the additional complication represented by the cost of travel to work.



Chapter 3. The additional cost of travel to work

In the previous chapter we saw how the tax and benefit system reduces the financial benefit of obtaining 'better jobs' for those lower down the income distribution. In this chapter, we focus on transport to show how travel costs limit the financial benefit of better jobs when these typically involve longer journeys, usually by car. This is an important issue when half of the jobs in the Tyneside urban area are typically more than 5km from place of residence so that motorised transport is the only practical option for many households to reach employment sites.

In the current policy discussion these themes are addressed under the label of 'transport disadvantage' ⁵⁶, a broad term used to cover two sets of related issues. First, structural limitations with transportation systems and connectivity make certain journeys difficult or impossible, especially by public transport. Second, individual characteristics such as disability, work patterns, care responsibilities or income level can make public transport unusable and/ or a private car unaffordable. For example, a low income person without a car is particularly disadvantaged when living in a society where car ownership is very high, public transport is poor and car use is the norm.⁵⁷ Transport disadvantage can give rise to transport poverty, such as where households spend a significant amount of their income on running a car to access employment.⁵⁸

Following this approach, this chapter explores how transport disadvantage arises for low income families in Newcastle and its urban area in relation to household level variables like income, and structural variables such as the distribution of jobs, the design of employment sites and the organisation of the public transport system. The cost of childcare for those in employment, and its effect as a barrier to taking up work or increasing hours, has been widely researched and discussed but transport costs and inconvenience have attracted much less attention. This chapter attempts to fill this gap.

3.1 A mosaic of job-rich and job-poor districts creates an extensive need for motorised transport to reach employment

As with most cities across the UK, Newcastle and its hinterland is a mosaic of job-rich and jobpoor areas. As the map in exhibit 3.1 shows, across much of the urban area (coloured white) there is less than one job per resident of working age (16-65). This includes our study areas in Byker, North Shields and Blyth (shown in yellow), which are primarily residential areas. The areas with a higher job density fall into two types: the light blue areas, mostly on the southern banks of the Tyne with an average of 1-2 jobs per resident and a small number of employment hotspots (coloured dark blue) where there are between 2 and 5 jobs per resident. The area of densest employment concentration is in Newcastle city centre with 73,000 jobs, 14% of the total for the local authority. Other hotspots are in the monofunctional industrial estates, business parks, retail parks and large hospitals on the periphery of the urban area or in separate areas, such as the employment pole in Cramlington, which lies south west of Blyth.

⁵⁶ For useful reviews of the concept of transport poverty and a range of empirical studies see: Currie and Delbosc (2011) 'Transport disadvantage: a review' in Currie, G. New Perspectives and Methods in Transport and Social Exclusion Research https://www.emerald. com/insight/content/doi/10.1108/9781780522012-002/full/html.

⁵⁷ See: Clifton, K., & Lucas, K. (2004) 'Examining the empirical evidence of transport inequality in the US and UK', In: K. Lucas (Ed.) Running on empty: Transport, social exclusion and environmental justice. Bristol: Policy Press; Crisp, R. et al (2018) Tackling transportrelated barriers to employment in low income neighbourhoods, Sheffield Hallam University. Available at: Tackling transport-related barriers to employment in low income neighbourhoods | Sheffield Hallam University (shu.ac.uk)

⁵⁸ Evidence review Transport and inequality for the Department for Transport by Gates et al https://natcen.ac.uk/our-research/research/ transport-and-inequality/ p.4., p.10.
Exhibit 3.1: Job density in Newcastle upon Tyne and its hinterland, by MSOA in 2011 59



The disconnection between places of residence and the main employment sites is evidenced by the data on distance travelled to work. The available data from the 2011 Census (exhibit 3.2) shows that 46% of Newcastle local authority residents in work, worked from home or within a 5km (3.1 mile) radius, which means that work should generally be accessible via active travel or a short bus/metro ride. Just over half of the working residents (54%) in the Newcastle local authority area commute more than 5km or have no fixed workplace and are likely to require public transport or a car to get to work. This pattern is fairly similar in the higher income areas (South Gosforth, Whitley Bay, Morpeth South and West) and the low income areas (such as those included in our study) across the Newcastle, North Tyneside and Northumberland local authorities. Exhibit 3.2: Distance travelled to work for selected areas in 2011 60

| | Working at or from home | Within 2kms of workplace | Workplace between 2kms and 5kms | Workplace above 5kms | No fixed workplace | Total (Employed) |
|--------------------------------|-------------------------------|--------------------------------|------------------------------------------|--------------------------------|-----------------------|---------------------|
| | | Short active travel zone | Long active travel zone | Motorised transport zone | | |
| Byker | 3% | 18% | 22% | 53% | 4% | 100% |
| City Centre & Arthur's Hill | 1% | 9% | 29% | 60% | 1% | 100% |
| South Heaton | 7% | 22% | 21% | 41% | 9% | 100% |
| Newcastle LA average | 9% | 18% | 19% | 45% | 9% | 100% |
| Objetan | 40/ | 000/ | 070/ | 400/ | <u> </u> | 4000/ |
| Chirton | 4% | 23% | 27% | 40% | 6% | 100% |
| North Shields | 5% | 29% | 30% | 32% | 4% | 100% |
| Percy Main | 7% | 17% | 28% | 40% | 8% | 100% |
| Whitley Bay | 37% | 21% | 11% | 15% | 16% | 100% |
| North Tyneside LA average | 14% | 21% | 21% | 33% | 11% | 100% |
| | | | | | | |
| Blyth Cowpen | 6% | 25% | 26% | 37% | 6% | 100% |
| Blyth Town | 6% | 35% | 15% | 39% | 5% | 100% |
| Morpeth South & West | 9% | 10% | 4% | 72% | 9% | 100% |
| Northumberland CC average | 18% | 21% | 12% | 39% | 10% | 100% |

Please note: percentages may not add up to 100% due to rounding.

3.2 A car is much more functional than public transport to reach employment for longer journeys

Outside the city centre, Newcastle is a low density city organised in large monofunctional zones designed primarily for car mobility, including residential suburbs, retail parks and business districts. Most employment and many residential areas are dispersed on the periphery. This not only creates longer travel to work journeys but means they are more likely to be orbital or irregular. In contrast, the public transport network is mainly organised in a radial way in and out of the city centre as the focal point⁶¹.

The overall result is that a car is more convenient than public transport for reaching most employment sites from most residential areas (exhibit 3.3). For someone dependent on public transport, the Newcastle urban area is a mix of accessible, difficult to access and practically inaccessible work locations, which change in relation to where the household lives and what public transport lines offer direct journeys to an employment area. By car the whole city is accessible within a 20–40-minute drive (depending on traffic), regardless of where the household is located.

⁶⁰ Census 2011, Nomis (ONS)

⁶¹ See Appendix 4.

Exhibit 3.3: Selected travel to work routes from the study areas to main employment poles 62

| Origin (residential area) | Destination (employment area) | Journey distance | Travel time by public transport 63 | Travel time by car ⁶⁴ |
|-----------------------------------|----------------------------------------------------------------------|--------------------|------------------------------------|-------------------------------------|
| Byker ('Wall' estate) | Jarrow industrial area (Amazon logistic centre) | 14 km / 8.7 miles | 45-50 minutes | 20 minutes |
| North Shields (Russell Street) | Jarrow industrial area (Amazon logistic centre) | 8 km / 5 miles | 27-39 minutes | 12 minutes |
| North Shields (Percy Main) | Newcastle city centre (Grainger Market) | 12 km / 7.6 miles | 21 minutes | 17-20 minutes |
| South Heaton (Third Avenue) | Metro Centre (Gateshead) | 11 km / 7 miles | 43-49 minutes | 18-27 minutes |
| Percy Main | Tyne Tunnel Trading Estate (JTF warehouses) | 1.5 km / 0.8 miles | 8 minutes (every 30 minutes) | 4 minutes |
| Blyth (Fourteenth Ave) | Cramlington industrial estate / business park (Nelson Park) | 9 km / 5.6 miles | 43-54 minutes | 12-21 minutes |

For instance, residents in Byker can use public transport to reach employment in the city centre of Newcastle conveniently via a direct metro or bus link which takes them to the centre of a dense walkable area in less than 15 minutes. But to reach the industrial estate of Jarrow in South Tyneside, they would have to take two metro lines and then walk for another 5-10 minutes so that the entire journey can easily take up to 50 minutes. By car, the same area can be accessed from Byker or North Shields with a 20–25-minute drive.

If in Byker residents do have transport choices to get to work; in Blyth accessing employment is likely to be 'by car or not at all'. Blyth has relatively few jobs in comparison to its population (exhibit 3.1) and its closest employment pole is in the nearby town of Cramlington, approximately 6 miles away. By car this employment site is reachable from Blyth with short trips of 12–21 minutes door to door, depending on traffic and itinerary. By public transport the same journey involves a tortuous route, changing buses and a 5–10 minute walk from the bus stop in Cramlington to the employer's door. Overall, the whole trip from Blyth to Cramlington by public transport can take 43-55 minutes, with hassle and uncertainty about waiting times and connections. On this basis, commuting this relatively short distance by public transport becomes a significant challenge.

The functionality of a car for travel to work in the Tyneside urban area is reinforced by the fact that most suburbs and most employment sites are designed for car access. Suburban residents have to walk to reach the closest bus stop, while a parked car can be accessed immediately. At the destination, many employment sites have spacious car parks close to the office entrance; while the walk from the bus stop to the office can be unpleasant and unsafe when employment sites are constructed around wide roads and limited pavements to facilitate car use (see exhibits 3.4 and 3.5). This makes a car more convenient than public transport (and even than active travel sometimes) for longer commutes and even for many short, direct travel to work journeys.

⁶² Source: Google Maps.

⁶³ It includes short walks at either end of the journey, i.e. the walk to reach the public transport stop from the origin of the journey and/or the walk to reach the core of the employment site from the nearest bus stop.

⁶⁴ It can vary according to traffic.

Exhibit 3.4: Quorum Business Park - car parks



Exhibit 3.5: Quorum Business Park – view from the bus stop of the main roundabout



The result is the primacy of the car as a means of travel to work across almost all parts of the urban area, regardless of topography, transport infrastructure and household income. Cars account for an average of 60% of travel to work journeys across Newcastle, North Tyneside and Northumberland. Our study areas mirror this general trend. Whether we consider Byker (a neighbourhood close to the core of the urban area with good public transport), Chirton (a peripheral suburb between Newcastle and North Tyneside with many employment poles within a 5km radius) or Blyth (an isolated town with poor public transport and little employment in the area), the picture is virtually the same. In all three study areas, 65%-70% of travel to work from these districts is by car (exhibit 3.6).

The only exception to this general trend is the dense city centre of Newcastle which looks quite different, more like a Scandinavian city. The centre has a combination of mixed-use, pedestrianisation and good public transport, with the city centre as the hub of the radially organised system. Here 41% of the residents of the area walk or cycle to work, an additional 29% travel to work by public transport, while 'only' 28% commute by car. All this happens despite 60% of the jobs of those living in the city centre being located more than 5kms from home ⁶⁵.

| | Working at or from home | Walking or cycling (active travel) | Public transport ⁶⁷ | Car or van ⁶⁸ | Other travel method ⁶⁹ | Total (in employment) |
|--------------------------------|----------------------------------|------------------------------------------|-----------------------------------|-----------------------------|-----------------------------------------|--------------------------|
| South Gosforth | 14% | 11% | 23% | 51% | 1% | 100% |
| South Heaton | 7% | 14% | 21% | 58% | 0% | 100% |
| City Centre & Arthur's Hill | 1% | 41% | 29% | 28% | 1% | 100% |
| Byker | 3% | 12% | 19% | 65% | 1% | 100% |
| Newcastle LA (average) | 9% | 12% | 18% | 60% | 1% | 100% |
| | | | | | | |
| Whitley Bay | 37% | 9% | 11% | 42% | 1% | 100% |
| North Shields | 5% | 14% | 20% | 60% | 1% | 100% |
| Chirton | 4% | 13% | 12% | 70% | 1% | 100% |
| Percy Main | 7% | 12% | 14% | 65% | 2% | 100% |
| North Tyneside LA (average) | 14% | 12% | 14% | 59% | 1% | 100% |
| | - • / | | | | | |
| Morpeth South & West | 9% | 10% | 3% | 77% | 1% | 100% |
| Blyth Cowpen | 6% | 14% | 7% | 72% | 1% | 100% |
| Blyth Town | 6% | 17% | 9% | 67% | 1% | 100% |
| Northumberland CC (average) | 18% | 13% | 5% | 63% | 1% | 100% |

Exhibit 3.6: Method of travel to work in selected areas (study areas [shaded] and comparison areas), 2011 ⁶⁶

3.3 The high financial cost of the car for low income families vs. the high cost and inconvenience of public transport

As we have seen so far, a car is key for employability in Newcastle and its hinterland: most employment sites are designed for car access, half of the journeys to work are greater than 5km and these commuting journeys are typically irregular or orbital rather than radially in and out of the centre. This is problematic for those on low incomes who may not be able to drive and

⁶⁵ Census 2011, Nomis.

⁶⁶ Census 2011, Nomis. Note: Averages are unweighted.

⁶⁷ Public transport includes coach, mainline rail, metro, bus, taxis.

⁶⁸ Either as driver or passenger.

⁶⁹ Includes motorcycles, scooters and mopeds.

would find it difficult to afford the cost of lessons and tests⁷⁰, so that some kinds of work may be effectively out of bounds due to location, shift patterns or other barriers.

Even where individuals have a driving licence, the convenience of having a car and the opportunities it enables comes at a significant financial cost. For low income households in particular, the costs of a car – vehicle purchase or hire purchase and running costs - are very high in relation to their income. As an illustration, consider in exhibit 3.7 a low income household looking to buy a 10 year old second-hand hatchback, something like a Vauxhall Astra or Ford Focus. At the end of 2021, the cash price of a second-hand 10-year-old hatchback with three or four years of unexpired life is around £2,000 at a secondary used car dealer; or, using hire purchase finance ⁷¹ arranged by the dealer, the car will cost £3,000. The running costs of this car – tax, insurance, fuel and basic maintenance – would add £2,000 a year with petrol at £5.80 a gallon at the end of 2021 (exhibit 3.8); by late June 2022 petrol had risen to around £8.70 a gallon⁷², and that petrol price increase had added £500 a year or £10 a week to the annual cost of running this car.

| | | Initial purchase cost | Finance payments (Monthly) | Total cost of purchase | Qualifications |
|--------------------------------|----------------------------------------------------|--------------------------|----------------------------------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Purchase with no finance | | £2,000 | £O | £2,000 | A second-hand car in good roadworthy condition |
| Purchase with finance | Scenario 1: £1000 deposit over 4 years | £1,000 | £37 | £2,776 | The purchaser has £1,000 deposit and a 4-year finance agreement (longest term to reduce monthly payments); the finance payment is around £37 per month. |
| | Scenario 2: £250 deposit over 4 years | £250 | £55 | £2,890 | The purchaser has £250 deposit and a 4-year finance agreement (longest term to reduce monthly payments); the finance payment is around £55 per month. |

Exhibit 3.7: Costs of purchasing a 10-year old second hand hatchback, end of 2021 73

⁷⁰ The cost of learning to drive is estimated at around £1,300 based on paying for an instructor https://www.confused.com/car-insurance/ learner/the-real-cost-of-learning-to-drive. The cost would be less if informal lessons were provided by a friend or family member: the minimum cost would be £119 for provisional licence and test fees, with an additional charge of around £500 to cover insuring a learner driver for a year https://www.comparethemarket.com/car-insurance/content/the-costs-of-learning-to-drive/.

⁷¹ Leasing (ie renting for a fixed period) is in principle cheaper than hire purchase (buying by instalments), but used car leases are generally available only on cars which are under 4 years and 50,000 miles. The low income household would be considering cheaper, older cars where hp is the only available form of credit. Here again the poor pay more.

⁷² https://www.rac.co.uk/drive/advice/fuel-watch/ accessed 29 June 2022

⁷³ https://www.autotrader.co.uk/car-finance/deals/vauxhall/astra Note: the target model is a 2010 Vauxhall Astra 1.4 petrol / 1.7 diesel.

Exhibit 3.8: Costs of running a 10-year old second-hand hatchback, 2021 74

Total annual cost of running a car: £2,030 (£39.04 per week)

(Based on a second-hand, mid-range 1.4 petrol engine in Band D for road tax)



The costs of running a car mean that generally there is a positive relationship between income and car ownership. In our study areas we can see significant disparities in car ownership between households in relation to tenure. For example, taking social renting households, car ownership ranges from 23% in North Shields to 46% in Blyth Cowpen. In contrast, 80% to 94% of mortgaged owner occupiers in these same areas have a car (exhibit 3.9). Furthermore, two car ownership is strikingly rare amongst low income households: in our MSOA study areas only 2% to 7% of households had two or more cars or vans, compared with 22% of all households in Byker, 34% in Chirton and 51% in Blyth Town⁷⁵. If the annual running cost of a second hand car was around £2,500 in late 2021 (rising to £3,000 by mid-2022) one car per household is all low income households with two earners can afford.

For low income households, the cost of owning and running a car will be difficult to meet but a car may be essential for some, including to access work and/or to combine work with caring responsibilities, or for those with mobility related disabilities. Researchers have introduced the notion of 'forced car ownership' which recognises that a car can be an expensive necessity; and studies in urban areas have shown that the level of such forced ownership is related to the lack of alternative public transport options, including for travel to work.⁷⁶

https://www.emerald.com/insight/content/doi/10.1108/9781780522012-002/full/html

⁷⁴ Costs are estimated for 2021. The cost of maintenance covers routine servicing but excludes large, unexpected bills.

⁷⁵ Census 2011, Nomis.

⁷⁶ See, for example, the work of Curl et al on Glasgow: Curl, A., Clark, J. & Kearns, A. (2017). Household car adoption and financial distress in deprived urban communities over time: a case of 'forced car ownership'? Transport Policy 65, 61 – 71. See also Currie and Delbosc (2011) pp.21-22 'Transport disadvantage: a review' in Currie, G. New Perspectives and Methods in Transport and Social Exclusion Research

| | Owned outright | Owned with a mortgage | Social renters | Private renter |
|----------------------|----------------|-----------------------|----------------|----------------|
| | % | % | % | % |
| Heaton South | 68.5% | 85.2% | 35.0% | 55.2% |
| Byker | 68.8% | 79.5% | 28.1% | 41.2% |
| North Shields | 72.1% | 89.3% | 23.3% | 52.4% |
| Chirton | 65.4% | 85.7% | 36.5% | 42.3% |
| Percy Main | 74.6% | 91.3% | 34.3% | 48.1% |
| Blyth Cowpen | 77.8% | 89.5% | 45.8% | 51.5% |
| Blyth Town | 79.5% | 94.2% | 39.5% | 47.4% |
| Weighted average | 72.9% | 88.2% | 34.9% | 49.9% |
| | | | | |
| Newcastle LA | 79.1% | 90.7% | 37.0% | 52.4% |
| North Tyneside LA | 80.2% | 92.9% | 42.4% | 59.9% |
| Northumberland CC | 88.7% | 96.1% | 55.1% | 75.8% |
| | | | | |
| UK (average in 2018) | 85.0% | 95.0% | 46.0% | 65.0% |

Exhibit 3.9: Percentage of households with one or more cars, by tenure type, for selected areas, 2018 ⁷⁷

The low income household's employment choices about car use are often then gendered when there are two workers and only one car. Typically, the male takes the car to work in full time employment and the woman walks to work or uses a short public transport journey to access the proximity labour market. In Newcastle, women account for 79% of part time workers and 76% of all part time workers travelling less than 5km to work are women. The findings are similar in all three local authority areas (exhibit 3.10) where women are much less likely to be travelling longer distances, as these are usually undertaken by car.



77 UK 2018 data: Table 47: Percentage of households with cars by income group, tenure and household, 2018. ONS and 2011 Census, ONS

Exhibit 3.10: Analysis of distance travelled to work split by gender and type in selected areas, 2011 ⁷⁸

| | Newcas Tyne | tle upon e LA | North Tyr | neside LA | Northumb | erland CC |
|---------------------------------------------------|----------------|------------------|-----------|-----------|----------|-----------|
| | Female % | Male % | Female % | Male % | Female % | Male % |
| Full time workers travelling 5kms or more | 33% | 67% | 35% | 65% | 35% | 65% |
| Part time workers travelling less than 5kms | 76% | 24% | 80% | 20% | 81% | 19% |

The alternative to a car is public transport where there are two relevant issues: cost and service availability. The affordability of public transport is shaped by policy on funding and in the UK public transport is not heavily subsidised, as it is in European cities, so that fares need to cover a large and increasing proportion of operating costs.⁷⁹ In English metropolitan areas, local bus fares have risen by 33.6% from 2011 to 2021; and by 95% since 2006.⁸⁰ As the RAC Foundation notes,⁸¹ the cost of bus and coach transport has increased significantly ahead of growth in wages and the cost of motoring over the past decade, especially since 2016 where bus travel costs have risen far faster than the overall cost of living.

Exhibit 3.11 shows this striking divergence between costs of public transport and wages since 2012. Weekly pay adjusted for inflation has barely grown by 10% in the period after 2012 (and this only returns real pay to where it was in 2008). Over the same period, the overall cost of living has risen by around 35% in real terms. Rail fares have moved in line with the retail price index and bus and coach fares have grown almost twice as fast, a 60% increase from 2012 to early 2022. This graph also shows how prices are increasing on a month by month basis in early 2022: most striking here is the cost of petrol and oil. However, it is clear from the way that transport costs have increased faster than average pay that a crisis in the cost of living started well before 2022.



78 Census 2011, Nomis.

Note: Part time is classified as working up to 31 hours per week.

79 For example, the National Audit Office found that in England outside London, 24% of bus operators' income comes from government subsidy and support, compared with 31% in 2010-11 NAO (2020) Improving local bus services in England outside London https://www. nao.org.uk/wp-content/uploads/2020/10/Improving-local-bus-services-in-England-outside-London.pdf

- 80 Department for Transport Bus Statistics, Table BUS0405a, based on the DfT Fares Survey, ONS https://www.gov.uk/government/ collections/bus-statistics
- 81 RAC Foundation, based on ONS data available at https://www.racfoundation.org/data/cost-of-transport-index



Exhibit 3.11: Change in the cost of travel in the last 10 years⁸²

From an individual passenger perspective, public transport costs depend on the complexity of the journey as well as the length because fragmentation of services between different operators can make multi-modal journeys more expensive. Infrequent and/or unreliable services add travel time, uncertainty and inconvenience to the high cost of public transport, all of which contribute to the increasing dominance of car use, as outlined earlier in this chapter.

Declining use of buses (in part due to higher fares) contributes to a worsening spiral of deteriorating services and higher fares, which then threatens service availability. In Tyne and Wear, the number of passenger journeys was falling even before the pandemic, from 129.9m in 2009/10 to 112.1m in 2018/19.⁸³ Without changes to increase funding support for bus operations and reduce fare levels, falling passenger numbers will continue to drive higher fares and reduced services. In Tyne and Wear, for example, it has been estimated that around 10-17% of the bus network will be cut in 2022⁸⁴.



82 (2012 =100). Data points relate to January) Source: ONS

83 Department for Transport Local bus passenger journeys, Table BUS0103 https://www.gov.uk/government/statistical-data-sets/bus01local-bus-passenger-journeys

84 Guardian 21st February 2022 https://www.theguardian.com/business/2022/feb/21/uk-government-pushed-to-come-clean-asdecisionon-bus-funding-looms; Chronicle 25th March 2022 https://www.chroniclelive.co.uk/news/north-east-news/cuts-newcastle-northtynesidebus-23504402

3.4 Conclusion

The labour market in Newcastle is spatially structured so that half of the jobs are typically more than 5km from home and hence motorised transport becomes essential for employability. The two main options – private car and public transport – both involve considerable costs for a low income household. A car involves a high financial cost from buying and running the car; while public transport is often complicated and/or slow for many travel to work journeys implying a high inconvenience cost, with a financial cost which is increasing significantly in real terms.

These various problems about the difficulty of travelling to work are illustrated in focus group responses shown in Panel 2.

Panel 2: Are there difficulties getting to work?

Are there difficulties getting to work?

"...there was a warehouse in Washington that had jobs, but it had a 6am start to do cleaning and I can't drive"

'I can't afford to travel to any other jobs'

'The length of time travelling on public transport' [is a barrier to getting a better job]

These kinds of additional costs and difficulties create a clear transport disadvantage for low income households, compared to middle and high income groups in Newcastle and its surrounding urban areas. They reduce the already slim benefit of taking on a better paid job unless that better job is close to home and/or easily accessible with a short/direct public transport trip. The overall result is constrained employment opportunities for low income households, which become more dependent on proximity labour markets within a 2-3km radius and/or on corridor labour markets defined by the accident of which transport lines run through their district.



Chapter 4. How low residual income leads to stressed households and depressed districts

So far, we have seen how the linear relation between jobs and liveability assumed by mainstream policy is complicated at the bottom of the income distribution by: a) the problem of low retention from gross wages; and b) the need to travel to access jobs. In this chapter we look at how expenditure on essentials like housing or energy further reduces the capacity of employment and income to generate liveability, especially when costs of essentials are rising rapidly.

With price inflation at levels not seen for forty years, costs of all kinds are currently rising at rates made worse by the Ukraine war. The media have discovered a 'cost of living crisis' which is real enough. However, this chapter contextualises the crisis as an acute episode, superimposed on long standing chronic difficulties about the squeezed residual incomes of lower income households after they have met the cost of essentials from their disposable post tax and benefits income.

In section 4.1 and 4.2 of this chapter we focus on chronic difficulties and the direct effects that the high cost of essentials has long had on the liveability of low income households, including those in work. In section 4.1 we show that in 2020 (before the current cost of living crisis) the cost of the first-order essentials of housing, utilities and transport was high in both relative and absolute terms for a low income household. This leaves them with a meagre residual income to spend on food, other essentials and discretionary items, and with extreme difficulty in building any savings.

In section 4.2 we turn to consider the current crisis and consider how the significant increase in the cost of essential goods and services has created seriously distressed households which, after cutting non-essential items and forgoing some near essentials like broadband, have to choose between basic essentials like heating and eating.

In section 4.3 we move from the experience of an individual household to the collective and indirect effects on liveability. What are the consequences for places at a district level where there is a concentration of households with low residual incomes? Section 4.4 provides a short conclusion which leads into the discussion of spaces for intervention in the final chapter.

4.1 The baseline for the crisis: uniform fixed charges on essentials squeeze residual income

It is important to recognise that the baseline for the current cost of living crisis for lower income households was established in the past decade. Their disposable incomes have always been modest so that expenditure on a first round of essentials - housing, utilities and transport - further reduces it to leave a meagre residual income for other essentials such as food and clothing, where some work-around economies are more possible.

Average expenditure on essential goods and services will also vary significantly according to household circumstances. For example, some households will have no or fairly low childcare costs, either because they have no children or because they can access unpaid informal care from family and friends. For those that have to pay for childcare to allow adults to work, there will be significant deductions from income.

This pre-crisis position can be illustrated by some numbers based on 2019-20 incomes and costs. Consider a household in Byker with two wage earners as in exhibit 4.1. A combination of wages, benefits and/or pension produces a gross income of £29,200 which after tax and benefits leaves a disposable net income of £24,700. From this, three large initial deductions are made for housing, transport and utilities so that an average household that does not need to pay for childcare has a residual income of £15,177 to cover other essentials.



Exhibit 4.1: Illustration of residual income for an average household in Byker, 2018

While all households require housing and utilities, and almost all will pay for transport, childcare is only an expense for some households, depending on household composition, work patterns and access to informal care. However, childcare is a significant expense for those households that need to pay for it, whether this is for pre-school childcare or for after school and holiday care. Households have access to free childcare of up to 15 hours for children aged 2 and up to 30 hours per week for 3 and 4 year olds.⁸⁵ However, this only covers a maximum of 38 weeks per year and is subject to local availability which means that some eligible households cannot take full advantage and, for those that do, many will still need to pay to secure sufficient hours of care to fit round their employment⁸⁶.

All of this means that childcare costs are not a standard item which most households pay; it can vary from zero to many thousands of pounds per year dependent on circumstances. As an illustration in exhibit 4.1 we assume that the Byker household in our illustration pays \pounds 53.18 per week per child, based on Department for Education data for the North East of England in 2019.⁸⁷ For two children the household's annual cost would be \pounds 5,530 per year (almost as much as the annual rent). This average of \pounds 53 per week is based on a parent who works part time (and therefore needs fewer hours). The equivalent weekly average for full time workers was \pounds 75; this works out at an annual cost of \pounds 7,800 for a household with two children.

⁸⁵ House of Commons Library (2021) Childcare. Support with costs (England) https://researchbriefings.files.parliament.uk/documents/CBP-8054/CBP-8054.pdf

⁸⁶ Local Government Association Costs and benefits of free childcare https://www.local.gov.uk/sites/default/files/documents/20190219%20 LGA%20Briefing%20-%20costs%20and%20benefits%20of%20free%20childcare.pdf

⁸⁷ ONS 'Childcare and early years survey of parents, 2019' SFR template National Statistics 240815 (publishing.service.gov.uk) The series was suspended after 2019 due to the pandemic.

For households with childcare, the residual household income in exhibit 4.1 would be significantly reduced to £9,647 (part time) or £7,377 (full time). There will be some households paying much more than this with a correspondingly severe impact on residual household income. Overall, the OECD calculates that the net cost of childcare in the UK (after support payments and tax credits) is around 25-30% of post-tax income across different household types (single and dual parent households) and income levels.⁸⁸

Considering all households, it is important to note that while income tax is generally proportionate to income and technically progressive, spend on essentials like utilities and transport is relatively flat or even regressive. Before the crisis in the late 2010s, available residual household income (after first round essentials and without considering childcare costs) is on average around 50-60% of gross income. But, if we compare districts with low and high average household income in one local authority area, first round household essentials in the lower income districts take a larger proportion of gross income than in high income districts. This is illustrated in exhibit 4.2 which compares our study area MSOAs with higher income MSOAs in the same local authority area.

The first and largest variation in percentage is in housing cost. Byker has relatively high levels of social housing where rents are lower than in the private rented sector. Nevertheless, Byker households still spend 19.5% of their gross income on housing, compared with 13.5% across the Newcastle local authority as a whole. The difference between the average and the poorest areas is even more striking in North Tyneside where households in Percy Main spend 24.2% of their gross income on housing, more than double that of the local authority on average.

While an average higher income household may spend more per year on housing in absolute terms, they are more likely to be paying a mortgage rather than rent and, hence, are acquiring an asset. As owner occupation is now the most significant tenure in England⁸⁹, lower income households that are renting, such as those in Byker, suffer a double inequality in relation to owner occupiers: first, they pay a relatively high share of their income as rent indefinitely and, second, they are not accumulating any wealth that can be realised later in their life, or passed on as an inheritance.



⁸⁸ OECD Net childcare costs in EU countries. Impact on family incomes and work incentives, 2019) https://www.oecd.org/els/soc/benefitsand-wages/Net%20childcare%20costs%20in%20EU%20countries_2019.pdf

⁸⁷ In 2019-20 56% of English households were owner occupiers, 26% social renters and 18% private renters. Source: Table FA1221 (S108) Household type by tenure https://www.gov.uk/government/statistical-data-sets/tenure-trends-and-cross-tenure-analysis



Exhibit 4.2: From gross to residual income in selected districts, 2018 90

After housing costs have been met, households pay what is effectively a fixed charge for utilities (gas, electricity, water) and transport, where the absolute amount spent is quite similar on average across lower and higher income districts. This is around £2,500 to £3,500 per household for transport and £1,300 to £1,600 for utilities. However, in relative terms the charges are proportionately larger for lower income households. For example, households in Byker spend on average 8.3% of their gross income on transport while in prosperous Gosforth they spend 6.5%. In low income Chirton, households spend 4.9% of gross income on utilities, while in higher income Whitley Bay they spend 3.1% on average.

The phenomenon of regressive or flat rate charges for first round essentials magnifies existing inequalities between high and low income households within the same local authority area. But more important for the argument of our chapter is that relatively high expenditure for first round essentials of housing, utilities and transport leaves low income households with very little residual income in absolute terms to cover everything else including food. In three of our study areas, Byker, Chirton and Blyth Cowpen, average residual household incomes (excluding childcare costs) were respectively £15,177, £14,319 and £15,929 a year, which means roughly £120-130 a week for each member of the household on the basis of an average of 2.4 people for every household⁹¹.

This is a small budget and low income households by the late 2010s had adapted by work arounds, cutting back where they could on items which many of us would regard as essential. For example, many low income households make do with a mobile phone but without home broadband.

⁹⁰ Income estimates for small areas, England & Wales, financial year ending 2018, ONS. Notes: 1. Total annual household income is the sum of the gross income of every member of the household plus any income from benefits such as Working Families Tax Credit. 2. Net annual household income is the sum of the net income of every member of the household. It is calculated using the same components as total income, but income is net of: income tax, national insurance, council tax, contribution to pension schemes, maintenance. 3. Housing costs include: rent (gross of housing benefit); water rates, community water charges and council water charges; mortgage interest payments (net of any tax relief); building insurance, and ground/service charges. No of households uses 2011 Census data. 4. Average transport and utility costs is calculated using factors derived from the Family Spending data on tenure and weighting by the number of households by type.

⁹¹ https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/families/bulletins/ familiesandhouseholds/2020#:~:text=The%20average%20household%20size%20in,1.1%25%20in%20the%20West%20Midlands .

A mobile phone is an absolute necessity for social and economic purposes – including holding down a job on zero or irregular hours - and typical expenditure in 2020 for mobile services (excluding the cost of the handset) was £38 per household per month (£456 per year).⁹² As Nesta point out, access to the internet via a good quality connection is also now a necessity for education, work, social and financial inclusion. However, the average household cost of broadband in 2020 was £30-£35 per month. This is considered 'unaffordable' by many lower income households⁹³, who rely more heavily on more expensive mobile data or on being able to find free Wi-Fi⁹⁴.

In this context, discretionary or postponable expenditures like a takeaway meal for the family, going to the gym, an occasional holiday, new replacement clothing and shoes, personal care and so on are luxuries that low income households will often find unaffordable. There is no margin for upgrade through energy saving windows or insulation for homeowners, while repairing or replacing a washing machine or a car can only be managed by expensive credit and/or cuts in other items of expenditure.

Another important consequence of relatively low residual income is highly restricted ability to save (and/or problems about getting into and out of debt). While the average UK adult had savings of £6,757 in 2020, individuals in low income families save very little and occasionally, often in the form of a small stash of cash at home rather than in designated savings accounts.⁹⁵ Around one third of British adults have less than £600 in savings, and a striking 41% have insufficient savings to live for a month without income⁹⁶.

4.2 The distressed household: when rising expenditure on essentials becomes unmanageable

The data on incomes and costs in the previous section mostly relates to the pre-pandemic 2019-2020 period. The 'cost of living crisis' that is unfolding in 2022 is set against this backdrop and looks certain to mean significantly higher costs for all households, though of course the impact will be most severe on those with lowest incomes. The issue of rising costs is particularly distressing because higher prices are affecting several areas of essential expenditure at once, including energy, food and transport.

Expenditure data from the ONS can be used to clarify the issues and show how threatening the crisis is because it presents data on all household spend, subdivided into categories for each decile from the poorest households in decile 1 to the richest households in decile 10. Before the crisis in 2019, exhibit 4.3 shows that for the lowest income households in deciles 1 and 2, almost one quarter of their total spending went on food and drink consumed within the home and on their utility bills. For those households in the middle of the income range in deciles 5 and 6, this was much lower at around 16%. On this basis, the government was in spring 2022 correct to suppose that, with food and motor fuel prices rising, the actual and projected increases in domestic energy costs were absolutely unmanageable for low income households. Hence, in May 2022, the Government offered £400 to all households with £1200 for those on Universal Credit and other benefits⁹⁷.

⁹² OfCom (2021) Communications Market Report https://www.ofcom.org.uk/research-and-data/multi-sector-research/cmr/cmr-2021/ interactive-data

⁹³ Nesta (2020) What is data poverty? What Is Data Poverty? | Nesta

⁹⁴ This was illustrated by focus group members who noted that lack of internet access made it more difficult to search for (better) work.

⁹⁵ https://www.bristol.ac.uk/media-library/sites/geography/migrated/documents/pfrc0910.pdf

⁹⁶ https://www.finder.com/uk/saving-statistics

⁹⁷ https://www.gov.uk/government/news/millions-of-most-vulnerable-households-will-receive-1200-of-help-with-cost-of-living

Ofgem estimate that the lifting of the energy price cap by 54% in April 2022 will affect 22 million UK households: those paying by direct debit will see an increase of £694 from £1,277 to £1,971 on average; the cost implications are even worse for those with pre-payment meters – typically lower income households - who will see an increase of £708 from £1,309 to £2,017.⁹⁸ A further significant rise is expected in October 2022 on the basis that oil and gas prices will continue to increase; the extent of this is not yet clear but the Office for Budget Responsibility in March 2022 forecasts an additional 40% increase in the energy price cap, which would mean bills of around £2,800 for direct debit and £2,825 for pre-payment. ⁹⁹ Actual bills could be even higher if oil and gas prices continue to rise.





On the basis of these forecasts, it is reasonable to expect the actual utilities costs in exhibit 4.3 for 2019 to have more or less doubled by autumn 2022, so that a household in the lowest income deciles would (without government support) be spending the equivalent of 20% of total expenditure on energy. Of course, such a level of increase in energy prices implies that (even with government support) many households will need to find ways to reduce energy use through extreme measures such as not using heating or limiting cooking. Note that state pensions and most benefit levels increased by only 3.1% in April 2022 and wage increases are lagging consumer price indexes.¹⁰¹

⁹⁸ https://www.ofgem.gov.uk/publications/price-cap-increase-ps693-april

⁹⁹ https://obr.uk/overview-of-the-march-2022-economic-and-fiscal-outlook/

¹⁰⁰ Family Spending, ONS. Notes: Households ranked by disposable income.; decile 1 is lowest and decile 10 is highest. Appendix 5 presents the expenditure on groceries and utilities per head

¹⁰¹ https://www.jrf.org.uk/press/main-out-work-benefit-sees-its-biggest-drop-value-fifty-years

The crisis of energy price increases is compounded by rapid inflation in the costs of other essentials. We saw in the previous chapter that the cost of bus and coach travel has been rising faster than inflation for some time. Large increases in cost are now also affecting motorists. For those using a car to travel to work, the price of fuel has risen by around 75% between January 2020 and June 2022 to reach 191p per litre for petrol and 198p per litre for diesel.¹⁰² This is well beyond normal levels of cyclicality: for instance, over the three years 2018 to 2020 the maximum prices reached in September 2018 were 131p for petrol and 135p for diesel. Driving 7,000 miles a year in a petrol family hatch back doing 35 mpg will at June 2022 prices cost some £1800 a year.

Any households needing to replace their vehicle in 2020 or 2021 will also have encountered second hand vehicle prices at historically high levels as shortages of new vehicles have pushed up the price of second hands¹⁰³. Early in 2022, the trade guide CAP HPI calculated that the average price of used cars had increased by 28% in the 12 months from January 2021 with 'price increases across all ages and mileages' and increases of more than 50% for in demand models like Toyota self-charging hybrids.¹⁰⁴

While some households can escape increased costs of motoring, all households are exposed to higher food prices. It is much more difficult to track the 'price of food' than it is to analyse petrol prices because of the diversity of products and ranges sold by various retailers. But increasing commodity, energy and transport costs are having a more systematic impact on food prices and these are expected to rise further during 2022 and then again in 2023 when global food shortage becomes critical.

To some extent households can manage food costs by buying cheaper versions of standard products or substituting different products for those where prices are rising faster; this kind of work-around substitution is part of the normal budgeting by lower income households. However, in present circumstances, supermarkets try to defend margins by stocking fewer low margin products and that has an impact on lower income households. As noted by food campaigner Jack Monroe, prices of 'value' product ranges have increased much faster than official estimates of food price inflation – around 5.1% by early 2022 - and where value ranges have been limited or discontinued, customers have been forced to switch to more expensive products.¹⁰⁵ By April 2022, food price inflation was at 6.9%¹⁰⁶ and expected to increase further.

The combination of inflating prices of many essentials well beyond increases in wages and/or benefits turns the exhausting difficulty of continuous management of tight household budgets into extreme crisis for lower income households. It also means that households further up the income distribution join the growing group of those struggling to sustain liveability as prices rise much faster than income. Work-around reductions in some areas are then necessary for middle income households to manage the escalating costs of essentials.

The next section turns from these household experiences of liveability to consider how the aggregate effects are felt at a district level, when many households in one district have their residual income squeezed.

¹⁰² BEIS, Weekly Road Fuel Prices https://www.gov.uk/government/statistics/weekly-road-fuel-prices

¹⁰³ https://www.theguardian.com/business/2022/feb/20/one-in-five-secondhand-cars-in-uk-cost-more-than-new-models

¹⁰⁴ Autocar 6th April 2022.

¹⁰⁵ https://www.theguardian.com/business/2022/jan/26/cost-of-living-crisis-ons-inflation-jack-monroe Jack Monroe's observations have prompted the ONS to reintroduce different estimates of inflation which reflect differences in household circumstances more accurately

¹⁰⁶ https://www.ons.gov.uk/economy/inflationandpriceindices/timeseries/czbj/mm23

4.3 Concentration of low income households leads to depressed districts with a limited 'high street economy'

Even before an unprecedented 'cost of living crisis', a concentration of low income households with individual difficulties about paying for essentials has collective consequences. These take the form of negative feedback for the quantity and quality of local services and employment. Districts are typically a mix of households with different incomes and housing tenures; but some districts have a much larger proportion of low income households which lead to sizeable district pockets of low residual income.

Using Universal Credit (UC) recipients as a proxy for low income households, we can see how low income households account for very different proportions of all households in high and low income MSOAs within one local authority. This general phenomenon emerges clearly in our three study areas, Newcastle upon Tyne, North Tyneside and Northumberland (exhibit 4.4).

Across the whole Newcastle local authority area, we calculate that UC recipients are present in 17% of all households. In certain MSOA districts, like the suburb of South Gosforth, there are very few of these low income households with UC recipients in less than 4% of all households. By way of contrast, in Byker UC recipients constitute a significant proportion, making up 30% of all households in the area.

This broad pattern can be seen in a slightly weaker form in Northumberland and North Tyneside local authority areas. Compared with Newcastle these local authority areas have a lower overall percentage of households receiving UC at 8% and 10% respectively. Here, relatively high income MSOAs in Whitley Bay in North Tyneside or the commuter town of Morpeth in Northumberland have only 2% of households on UC; while the MSOA districts of Chirton and Blyth Cowpen each have around 20% of households receiving UC.

An MSOA is defined as between 2,000 and 6,000¹⁰⁷ households and our study areas each comprise two MSOAs. Thus, at one end of the range Blyth Cowpen has just under 3,000 households and Byker has nearly 6,000 households. A concentration of low income households in a district like this lowers the average residual income, effectively limiting the total amount of locally originating discretionary expenditure in the high street economy. Here are the businesses which line a typical high street: retail shops including bakeries, pharmacies and newsagents; personal services like hairdressers and opticians; and spaces for sociability like cafés, bars and pubs.

¹⁰⁷ As local populations decrease or increase, MSOA boundaries need periodically to be redrawn. This means that they can at some points (prior to redefinition) have fewer than 2,000 households or more than 6,000 households.

| | Total households (2011) | UC recipients as a share of all households (2020) | Average gross household income (all households) 2018 |
|----------------------|----------------------------|---------------------------------------------------------|------------------------------------------------------------|
| | No. | % | £ |
| Byker | 5,675 | 30% | 29,200 |
| Heaton South | 4,536 | 14% | 35,100 |
| South Gosforth | 4,214 | 4% | 52,500 |
| Newcastle LA | 117,153 | 17% | 35,503 |
| | | | |
| Chirton | 3,471 | 21% | 29,000 |
| Percy Main | 3,883 | 19% | 30,200 |
| North Shields | 3,261 | 12% | 34,500 |
| Whitley Bay | 2,294 | 2% | 52,600 |
| North Tyneside LA | 91,295 | 10% | 37,071 |
| | | | |
| Blyth Cowpen | 2,984 | 21% | 25,800 |
| Blyth Town | 4,067 | 15% | 31,600 |
| Morpeth South & West | 2,548 | 2% | 53,800 |
| Northumberland LA | 138,534 | 8% | 37,645 |

Exhibit 4.4: Average income and share of Universal Credit (UC) recipients for selected districts, 2018 ¹⁰⁸

In some high streets it is an up-market mix and elsewhere it is a down-market mix, and the impact of residual household income at a local level on high street positioning can be obvious and dramatic. There are also important supply side implications for the quantity and quality of local employment. Concentration of low income/low spending households in one district can have negative supply side effects on the local economy, insofar as low spend limits the local employment base in terms of numbers of available jobs and wage levels¹⁰⁹ (exhibit 4.5).

The local driver is powerful because the difference in residual income is large between high and low income MSOAs. In North Tyneside local authority area, for example, the average residual household income of £28,764 in Whitley Bay is double that in Chirton where it is £14,319. Similar differences can be found in Newcastle, where there is a large gap between Byker (£15,177) and South Gosforth (£26,811) and even more so in Northumberland between Blyth Cowpen (£15,929) and Morpeth S&W (£31,888)¹¹⁰.

¹⁰⁸ Data from Stat-xplore.dwp.gov.uk for UC recipients.

¹⁰⁹ Froud, Haslam, Johal and Williams (2020) '(How) does productivity matter in the foundational economy?', Local Economy. Vol. 35(4) 316–336 https://journals.sagepub.com/doi/full/10.1177/0269094220956952

¹¹⁰ See Appendix 6 for the detailed data on residual household income in each of the study areas.



The outcomes are not entirely straightforward because the negative effects of low residual income are mediated by many factors. These include the local presence of middle income groups, the success of supermarket chains in capturing all or most of the grocery spend from independents, attractiveness of the high street to outside visitors, adjacent location of employment sites and so on¹¹¹. But the bottom line is that many high street economies are very much dependant on local expenditure as we found in a study of small Welsh towns, where 30-40% of the footfall is from residents within easy walking distance of the high street¹¹².

If the local catchment is preponderantly of low income families with little residual income, a likely outcome is the formation of depressed districts with a limited and degraded high street economy meeting bottom of the market demands.

For low income households the depressed district creates problems not only about accessibility of local services and retail amenities but also in terms of quality of life as they lose access to the social infrastructure of the high street which is valuable for social interaction and sustaining community. A degraded high street economy, in turn, also contributes to a limited range of local employment opportunities, thus reinforcing liveability challenges.

A low income district will not necessarily become a depressed district. Some multicultural districts where first and second generation immigrants concentrate (like earlier traditional working class districts) show that low income areas can nonetheless develop a vibrant high street economy of grocery stores, fashion and grooming shops, cafés and social/cultural venues. This usually happens when large supermarkets have not entirely captured the local food spend, so that the high street is anchored by a base of grocery stores on which cafés, hairdressers, bars etc. can prosper. Housing stock and access to workspace also plays a key role: attractive low-cost housing stock can attract new "middle class pioneers" who engage with the high street stabilising its economy, although if this process is not regulated the result can be increasing gentrification which prices out the locals.

¹¹² A study of three Welsh towns found that 30-40% of visitors to the town centre come from a 10-minute catchment, i.e. within walking distance of the high street. Source: Foundational Economy Research Ltd (2021) Small Towns Big Issues https://gov.wales/small-towns-big-issues-independent-research-report

The quotes from focus groups presented in Panel 3 illustrate the limited local employment options in the three study areas.

Panel 3: What jobs are available locally?

What jobs are available locally?

- · 'cleaning'
- 'agency'
- 'The length of time travelling on public transport' [is a barrier to getting a better job]
- · 'Savers' [local shop]
- · 'low paid, crap jobs'
- · 'jobs with anti-social hours'
- · 'no decent jobs unless you catch the bus to town'
- · 'There are no jobs, just coffee shops and charity shops'
- · 'working in pubs'
- · 'Asda or shift work'
- · 'zero hour contracts'
- 'There's not a lot of jobs in this area'

As shown in Chapter 3 of this report, low income households are more dependent than middle and higher income households on availability of local jobs. In districts with a weak high street economy, many low income households compete for a limited number of local, (often entry level) jobs which are accessible with no major transport costs.

4.4 Conclusion: tight margins, few choices

Low income households have for a decade or more lived in a narrow world of constraint. The tax and benefit system is only the first part of the problem of the limited capacity of incomes to sustain their liveability. Household expenditure on first round essentials like housing, utilities and transport can then act as flat rate or even regressive charges on lower income households, leaving little residual income to spend on other goods and essentials.

The cost of living crisis has magnified this problem with the increase in the cost of many essentials in relation to lagging wages and benefits. Prior to the crisis, the North East had many low income households in difficulty who depended on careful management of spending and work-arounds. Now there are an increased number of distressed households which are losing the struggle for liveability because next winter they will only be able to afford one essential like heating at the expense of another like food.

This is not just an individual problem for stressed households, it is a collective problem for depressed districts. Concentration of low income households in certain districts further aggravates the liveability problems of those households via negative feedback effects on available high street retail choice and social amenities. A weak high street economy then reduces the availability of accessible local employment for low income households.

All this configures a very different world for low income households compared to their middle and high income counterparts. The world of middle income households is one where income creates choices and opportunities at an accessible cost so that rewarding compromises can often be found. The world of the low income household is one where income does not produce choice, because every choice comes at a high cost, contributing to continuous worry about covering essentials, necessary trade-offs and fear of unexpected costs.

The spatial relation between home and working also highlights this problem clearly. Middle and high income groups can decide to stay or leave an area for work, depending on opportunities, and will not be constrained too much by transport costs. By way of contrast, for low income households both options come at a high cost. Commuting out of the district for work means high financial and/or time costs in terms of transport, which can significantly reduce the gains of employment when longer distances and motorised transport is involved; but staying within the district will imply a limited employment offer with little choice and competition from other low skilled workers.



Chapter 5. Policy implications: making jobs a driver of liveability by (re)building synergies with transport, housing and childcare

As shown in this report, the link between employment and liveability is largely broken at the bottom of the income distribution where there are problems, first, about not enough disposable and residual income and, second, that income in itself does not generate liveability. Hence the current policy focus on getting people into jobs will yield limited positive results if the economic aim is to raise the living standards of millions of British households.

On these issues we need to go back to the past. In the aftermath of World War 2, policy and practice reflected the implicit belief that household liveability was a broad, multi-dimensional problem. Income from wages had to be complemented by generous social provision of goods and services – social housing, comprehensive healthcare, municipal transport, secondary and primary schooling etc – free or at low cost. In the 1980s assumptions shifted, and Conservative policy and practice increasingly saw household liveability as a less faceted problem with income from waged employment as the main driver of liveability giving citizens freedom to spend what they earned.

New Labour, after 1997, represented a partial rebalancing towards Tony Blair's 'public realm'. That focused narrowly on more funding and reform of the universal services in health and education (but with workfare and without building social housing so many 1980s priorities were simply carried over). All this was unsustainably funded on the tax dividend from growth fuelled by credit deregulation which ended in 2008 with the financial crisis. Afterwards, under Coalition and Conservative Governments, austerity policies on funding health and education aggravated the structural limits set by low growth; and job creation was celebrated but with increasing recognition that this replicated low pay and required massive state subvention.

Hence the attraction of more and better jobs and sustained economic growth. But a deregulated UK economy brings more of the same jobs and the UK's secular economic growth rate was in long term decline even before the pandemic and Ukraine war brought supply side shocks. We have now reached the end of the road for the 'more and better jobs' trope. Of course, the earnings from jobs are and should be an important driver of liveability, but policy and practice need to recover the old insight that jobs contribute to household liveability in conjunction with other elements of social provision. When, as now, these elements are not aligned, jobs alone will not generate liveability.

The issue is how do we rebalance when much has changed in economy and society. The real challenge is hence not linking individuals to jobs but realigning the elements of household income and social provision to generate liveability. Not just for those at the bottom of the household income distribution but especially for those households with the lowest incomes. It should be possible to have low household earnings or be an unpaid carer without suffering the crippling disadvantages of poverty in our society.

This will require interventions in a number of areas across employment, local transport, social housing and childcare. In the next section we will discuss these interventions looking at the problem of blockages and opportunities at the national level and the regional cum local levels. Throughout, our emphasis is on what is possible within existing constraints and how to shift those constraints in a complex system of multi-level governance, which in its present form inhibits change.

5.1 Employment

To reconstitute the link between jobs and liveability at the bottom of the income distribution several changes need first to occur in and around employment practice and public policy. In policy, the first and most important thing to do is reform the tax and benefits system which works in a dysfunctional way for many households and districts, in that it gives low benefits for all claimants and reduces the rewards of higher wages for the low paid. It is paradoxical that a society which places such great faith in financial incentives has constructed a labour market where low paid individuals have little significant financial incentive to work longer hours or get a better paid job.

Comprehensive reform of the tax and benefit system is within the power of Westminster government but unlikely to happen for both intellectual/ideological and electoral/practical reasons. On the centre right, many politicians are ideologically attached to the 'low taxes' idea that private income automatically means freedom of market choice. This position is validated by the experience of higher income households who have choices and often have not directly experienced the low retained incomes that mean constrained choices. At the same time, on the centre left many politicians buy into an economic growth agenda, on the grounds that it would semi-automatically increase tax revenues for social spending from the existing system.

However, the more fundamental obstacle is practical/electoral. A comprehensive reform of the tax system would create losers as well as winners, especially if it involved shifting the burden of taxes from income onto wealth and disturbing a system originally designed in the 1940s so that PAYE and social insurance charges on working class incomes could pay for the welfare state. Personal wealth in the UK (i.e., private assets minus private debt) is now approaching 650% of national income and is largely untaxed. The political problem is that a substantial part of that wealth is held in the form of house property by higher income groups.

At the same time, more modest but meaningful tax and benefits reform is entirely feasible. Income tax and national insurance thresholds are reviewed before every budget and the Universal Credit (UC) taper was recently reduced from 63% to 55% of disposable income. What is clearly needed is policy with worked examples that show how a raising of tax thresholds and a reduction in the UC taper rate would allow typical low income households to retain more of their gross income and improve retention at the margin from wage increases.

There could also be a substantial up lift in the benefit levels for at least some of the one third or so of UC claimants drawing benefits with no work requirement. Benefit claiming has been stigmatised in our society and the media have fanned suspicions about undeserving and workshy claimants. But a weekly £30 uplift for carers and those with disabilities is entirely doable. This would do no more than draw on the social attitudes to disadvantage which have already been tapped by campaigners like Marcus Rashford on child poverty.

And, if the aim is to improve the capacity of employment to generate liveability, we do not have to wait for the central state to reform tax and benefits. At regional and local level there are possibilities of constructive intervention for liveability by local actors like large public and private employers; and scope for place makers, like housing associations, alongside place connectors, like transport authorities.

Local actors can make a difference. Thus, medium and large employers independently can develop targeted 'grow your own' policies for workforce development and retention which explicitly target depressed districts and the workers who get trapped in local labour markets. But, if employers, anchor institutions and local and regional authorities work together in alliances for change, they can do so much more.

First and most straightforwardly, large public and private employers could stabilise household incomes by committing to regular weekly earnings for all workers. Irregular weekly earnings in a household undermine any kind of domestic management and expenditure planning, especially under current UC benefits rules. At present, public policy covers only the hourly minimum wage but does not ban zero-hour contracts so that irregular income as well as low wages is the British disease.

Large employers of low paid workers should recognise that flexibilisation of labour according to demand variations is convenient, but its consequences are socially irresponsible if pay is irregular. Of course, the demand for labour is irregular in many service activities and many employers cannot offer a daily or weekly minimum of guaranteed hours given seasonal and daily fluctuations in demand. But more should adopt practice like that of Manchester Airport Group which offers 'annualised hours contracts' to security officers and such like; they are paid for 38 or 31 hours every week through the year on the basis that actual hours worked will be higher in peak weeks and lower in slack weeks¹¹³.

More imaginatively, large public and private employers could also develop 'grow your own' policies of workforce recruitment, development and retention. The explicit mission should be to enable workers with few qualifications to start at the bottom with an entry level job so that those with ambition and aptitude can advance in terms of responsibility and pay into different and more senior roles. These routes should be aimed more broadly than the 18-25 age group more usually targeted, to attract those looking for second or third chances in the labour market. The career ladders which allow this progression have to be constructed because they usually do not exist; and hiring criteria may have to be changed to provide entrance to those who could benefit from these opportunities.

This is especially important in a region like North East England. Employers everywhere use formal criteria like age and/or academic qualifications to simplify choice and screen out some applicants. But in a regional economy, like the North East, with a relatively poor record of net job creation, the risk is that application from older workers with low qualifications will be systematically ignored or discarded even though they could do the job with appropriate support. Focus group participants certainly believed that this was happening, as illustrated in Panel 4.

Panel 4: Do you think you can access employment opportunities?

Do you think you can access employment opportunities?

'Once you are over 50 you are invisible'

'I'm too old at 28'

'Too old for an apprenticeship - there is Kickstart for 16-24 year olds, but nothing for over 25's'

CVs have to have your age on or school information on with dates; everyone who was over 25, employers employ younger people as they are cheaper, qualifications are out of date when you are in your 40s and they don't match with experience

I can't find any courses (would like to be a nurse)

The factories now use agencies bringing people from outside of (this town) and only have temporary roles

¹¹³ https://careers.magairports.com/job/Manchester-Airport-Aviation-Security-Officer-Annualised/716610501/

Hence it is important that 'grow your own' policies have a spatial focus as well as group or demographic targets. Responsible large employers already see they have a social responsibility to treat minority groups fairly and to reach out to groups, like NEETs (those not in employment, education or training), who are furthest from the labour market. They should also recognise that they have a spatial responsibility to reach into depressed districts and target those groups, like women with few academic qualifications, who are trapped in local labour markets.

Candidates from depressed districts might not apply for certain jobs, not because they do not have the skills or attitude, but because they are discouraged and/or do not know about job opportunities outside their immediate surroundings and acquaintances circles. This requires proactive recruitment policies which reach into depressed districts to publicise job opportunities – in accessible places like supermarkets or community centres - which would otherwise be ignored and to line up support to help with applications.

As we explain in our report for Welsh Government on NHS Wales, active 'grow your own' workforce policies are being pioneered by Welsh Health Boards like Hywel Dda and Aneurin Bevan, which have developed career paths to allow health care assistants to progress through part time study to become registered nurses. They are also working on maintaining traditional apprenticeships which recruit the willing and thereby avoid the 'middle class capture' whereby English apprenticeships are increasingly focused on top-up in work training¹¹⁴. Further steps with the credentialisation of care sector experience are being considered.

Such policies should be standard practice in all large employers. The North East has an exciting opportunity to develop socially and spatially responsible recruitment and workforce development policies in the new battery factory in Blyth. Here, British Volt will build the UK's first giga factory for electric car batteries and thereby create 3,000 jobs. This is a strategic opportunity to ensure that a substantial portion of these jobs goes to recruits from Blyth Cowpen and Blyth Town, and that low skilled entry jobs enable career progression into better skilled and better paid jobs over time.

5.2 Beyond employment: housing, transport and childcare

Employment alone is not enough for liveability, even with progressive workforce recruitment and development and even with reform of income retention rates after tax and benefits. As exhibit 5.1 shows, the problem is two dimensional and requires alignment of several different elements.

Tax and benefits reform and good employment practice help to boost household liveability on the revenue side. But they do nothing to boost liveability on the expenditure side. This depends on household consumption of collectively provided free or low-cost foundational goods and services, which effectively boost the purchasing power of low income households. Furthermore, this kind of collective provision feeds back into increased liveability gains from employment, as when a good public transport system reduces the financial/hassle cost of commuting to work or low-cost social housing increases residual income.

114 Sarah O'Connor, 'Capture of Apprenticeships', Financial Times https://www.ft.com/content/a90913f1-9f05-46a3-a3b3-e7dd4752ed38



The issues about collective provision can only be addressed by a coalition of regional actors working together to do what is possible within their existing powers and lobbying national government for framework change and more powers where needed.

Regional devolution is already on the agenda through elected mayors and city region deals, where the agenda is generally focused on GVA and raising regional tax receipts to match expenditure. The liveability agenda creates new opportunity to channel the demand for more regional devolution and local decision making into constructive channels. Plans for reforming collective consumption that will make a difference for low income households should be shaped and championed by an alliance of local place makers, like housing associations and health trusts and local place connectors, like the Tyne and Wear Passenger Transport Executive.

Social housing is a first key element of collective provision. At the point of peak provision in the 1970s, when male wages were high, 35% of the UK population lived in social housing. Paradoxically, as low wage irregular employment subsequently proliferated, social housing declined to the point where it now accounts for no more than 15% of housing stock. That pushes many lower income households into the more expensive and less secure alternative of private renting. In England, but not in Wales or Scotland, the housing grant system has been centrally set so that housing associations have tilted towards building 'affordable' (not social) housing at up to 80% of market rents. That should be reversed.

As part of an alliance for devolved change, local stakeholders in place and connection need to take the lead in pressing for the expansion of the social housing stock. The provision of accessible and low cost rented housing of good quality with security of tenure is both the core business of the housing associations and a key support for households in depressed districts. In North East England addressing liveability by expanding the stock of social housing may be more straightforward, and more directly relevant for some households than engineering an increased supply of jobs or of high pay/high skill/high productivity jobs. And with some creative urban planning, it should be possible to develop social housing at relatively small scale, enabling mixed communities in terms of ages and incomes and avoiding new depressed districts being established.

Public transport is a second key element that needs to be aligned with employment to generate liveability for low income households. The argument and evidence in chapter 3 demonstrates the importance of transport related problems about access to work. The implication is that candidates from depressed districts might not consider certain jobs because travel to work is too expensive by car and too complicated by bus. Here again there are opportunities to rethink the role of the bus system because the existing deregulated model is completely discredited and being replaced in a piecemeal way in some metropolitan areas.

Outside London, the dominant model involves private companies with local monopolies running only the bus services where high fares can cover their costs with a margin. The result has been a long term decline in bus usage. This is not helped by a pandemic after which passenger numbers are down by 25% in the North East, which requires something altogether more radical than the current bus service improvement plan to reverse the trend¹¹⁵. Like other UK urban areas, Tyne and Wear needs a new bus system which has lower fares and more frequent orbital journeys connecting home and work¹¹⁶.

The reform agenda in Greater Manchester involves a move to the Transport for London (TfL) model whereby the timetable is publicly controlled, and private operators remit money from the fare box to that authority. But this London organisational model is only workable with adequate central funding; and TfL now claims its bus services are in 'managed decline' because central government is not covering its post pandemic funding gap.¹¹⁷ The UK needs an explicit shift towards the mainland European approach of treating public transport as a social good, whose wider benefits depend on low fares which require subsidy that should be a local prerogative¹¹⁸. The climate crisis only reinforces the social imperative for low passenger cost and an improved public transport network.

The UK Treasury will be reluctant to let go of the principle that public transport services should recover their operating costs. But nonetheless there is something that could be done immediately even within the existing frame. For instance, urban transport authorities could work with large employers to take responsibility for innovative services (shuttles, minibuses etc.) which connect depressed districts with job rich areas.

Care services are also a third crucial element that needs to be aligned with employment to improve the liveability of low income households. It is clear that childcare responsibilities limit (especially) women's participation in the labour market as we see from the high proportion of women working part time. For working parents there are high financial costs for formal care and/or heavy reliance on family and friends for informal care. The UK has one of the highest childcare costs in the OECD¹¹⁹ and, while there is some free childcare provision for low income households, this is deficient in many ways.

The free provision system in the UK is for pre-school children aged 3 to 4 years and covers a maximum of 30 hours a week for 38 weeks a year (or fewer hours over more weeks)¹²⁰. This leaves significant gaps for the remaining hours, as well as for older children in school holidays. Furthermore, the service is currently organised so that households on UC have to pay upfront

¹¹⁵ https://www.newcastle.gov.uk/citylife-news/transport-leaders-approve-regions-bus-service-improvement-plan

¹¹⁶ In Europe cities are working on the transition from "radial transport systems" to "matrix transport system". See for instance Barcelona: https://www.barcelona.cat/mobilitat/sites/default/files/documents/nxb-20-09-2019_eng.pdf

¹¹⁷ https://www.standard.co.uk/news/london/tfl-bus-cuts-fare-rise-london-transport-route-hackney-islington-b982622.html

¹¹⁸ https://www.centreforcities.org/blog/whats-next-for-transport-for-london/

¹¹⁹ According to the OECD (2020), 'The cost of non-parental childcare is high in many OECD countries, e.g. about half of women's median full-time earnings for a two-earner family with two children in care in Japan, and the United Kingdom. Support programmes often reduce the costs for low income families, but out-of-pocket costs often still sum to a large share of earnings for low paid parents, including single mothers (e.g. Ireland, the Slovak Republic, and the United Kingdom).' Is Childcare Affordable? POLICY BRIEF ON EMPLOYMENT, LABOUR AND SOCIAL AFFAIRS (oecd.org)

¹²⁰ https://www.gov.uk/30-hours-free-childcare

and are refunded later¹²¹. Many low income households cannot afford to do that because as shown in the previous chapter they have very little savings. The result, as discussed in a recent report¹²², is that many eligible parents do not take up 'free' childcare places and so are unable to work full time.

A greater availability of free childcare, including for school age children in holidays and after school in depressed districts, would both reduce costs to households and open up more employment choices. The national framework needs to be changed, and at a local level we need to encourage diverse action by housing providers and other anchor institutions that can contribute to build the capability of individuals and the liveability of households according to the nature of their service or production activity.

As we have noted, employers can regularise weekly earnings and develop coordinated 'grow your own' employment initiatives including targeted recruitment for apprenticeships and career pathways for older candidates with limited academic qualifications. They can also provide employability support to keep individuals in employment, including mentoring and specialist mental health support and enlistment of primary health care.

In alliance, others can, with employers, organise subsidised transport from residential areas with few jobs to key employer locations (e.g. retail parks and industrial sites); because cheap transport that suits shift patterns opens opportunity for those trapped in proximity labour markets. Equally important, local authorities and anchors can organise support for childcare outside school hours e.g. holiday clubs and after school activity clubs, recognising that part-time workers in low income households need childcare before they can work longer hours but cannot afford childcare from their low wages.

Then different anchors should think about what initiatives and support they can provide in their domain. Housing associations could provide hard and soft support for their tenants. Not just by managing arrears and increasing hardship funds but with initiative of all kinds to deal practically with issues like food and fuel poverty. There is a need to deal with the immediate winter heating problems of tenants in fuel poverty; and to address issues about food deserts and cooking capabilities by supplementing food bank services with more imaginative domestic economy initiatives like discount ingredient boxes, meal kits and help with recipes and simple equipment like slow cookers.¹²³

All can support the regeneration of high streets by coordinating anchor moves and relocations so that office workplaces and service points are as far as possible located on district high streets. And prioritise upgrading social infrastructure because green spaces, clubs and meeting spaces (for all ages and interests) enable free or low cost activities which should connect with social prescribing and community-driven initiatives. Urban regeneration budgets and plans need to recognise that capital and revenue support for such facilities should be factored into regeneration plans.

Many constructive things can be done by individual institutions without asking for permission, and not moving at the pace of the slowest ship in the convoy but speeding the convoy up.

¹²¹ An additional problem is that providers have argued that the funding they receive via this scheme is inadequate to cover the costs. For some of the problems of the existing childcare system see: https://theconversation.com/why-the-uk-childcare-system-is-at-breaking-point-168151; https://www.eyalliance.org.uk/news/2021/12/parents-do-not-think-government-doing-enough-make-childcare-affordable

¹²² See also IFS (2019) Early Education and Childcare Spending which shows that lower income households are less likely/ able to take up early years childcare Early education and childcare spending - Institute For Fiscal Studies - IFS and https://www.theguardian.com/ money/2021/sep/12/uk-failing-on-childcare-finds-survey-of-over-2000-working-parents

¹²³ See for example, the Well-Fed initiative developed in North Wales https://www.cancook.co.uk/about-well-fed/

Appendices

Appendix 1. Details of changes in disposable income summarised in exhibit 2.2

Exhibit 2.2 presents four illustrative households in Byker to show the effect on take home income (after taxes and benefits) of moving into employment. The tables below show the detailed workings for each of these four illustrative households, comparing the disposable income when household members are unemployed and looking for work, with disposable income in employment. Moving into work brings in wages and leads to payment of income tax and national insurance (for those households above the relevant thresholds), modest pension contributions and a reduction in benefits and Council Tax credit. The overall effect on disposable income is the result of all these changes.

(a) Single, 39 years old, no dependents and in good health¹²⁴

Change Unemployed before and Change per % and looking In work after pay week £ for work increase £0.00 £8,320.00 £8,320.00 £160.00 Income £0.00 National Insurance £0.00 £0.00 -£332.80 -£332.80 Pension (4%) £0.00 £0.00 £7,987.20 £7,987.20 £153.60 Income tax £0.00 £0.00 £0.00 £0.00 £7,987.20 £7,987.20 £153.60 Universal Credit £9,105.20 £4,712.24 -£4,392.96 Before Council Tax credit £9,105.20 £12,699.44 £3,594.24 £69.12 39.5% Council Tax Credit £908.44 £850.72 -£57.72 **DISPOSABLE INCOME** £10,013.64 £13.550.16 £3.536.52 £68.01 35.3%

Privately renting a 1 bed flat in NE6 1AA @ £97.81pw

124 Source: https://www.turn2us.org.uk/

Notes: Single, 39 years old in good health with no caring demands; lives in a privately rented 1 bedroom flat @£97.81 pw and flat is in Council Tax band A. In a pension scheme -contributes 4% of gross income. Tax free allowance is £12,570 in 2021/22. National Insurance threshold is set at: <=£797 =0%, above £797 and <£4,189 =12% (per week). Council Tax is estimated using the Turn 2 reckoner. Savings less than £5k.

(b) Single, 39 years old, no dependents and in good health¹²⁵

Renting from a local authority a 1 bed flat in NE6 1AA @ £64.91pw

| | Unemployed and looking for work | In work | Change before and after pay increase | Change per week £ | % |
|---------------------------|---------------------------------------|------------|-----------------------------------------------|----------------------|-------|
| Income | £0.00 | £8,320.00 | £8,320.00 | £160.00 | |
| National Insurance | £0.00 | £0.00 | £0.00 | | |
| Pension (4%) | £0.00 | -£332.80 | -£332.80 | | |
| | £0.00 | £7,987.20 | £7,987.20 | £153.60 | |
| Income tax | £0.00 | £0.00 | £0.00 | | |
| | £0.00 | £7,987.20 | £7,987.20 | £153.60 | |
| Universal Credit | £7,394.40 | £3,001.44 | -£4,392.96 | | |
| Before Council Tax credit | £7,394.40 | £10,988.64 | £3,594.24 | £69.12 | 48.6% |
| Council Tax Credit | £901.16 | £850.72 | -£50.44 | | |
| DISPOSABLE INCOME | £8,295.56 | £11,839.36 | £3,543.80 | £68.15 | 42.7% |

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125 Source: https://www.turn2us.org.uk/

Notes: Single, 39 years old in good health with no caring demands; renting a local authority owned 1 bedroom flat @£64.91 pw and flat is in Council Tax band A. In a pension scheme -contributes 4% of gross income. Tax free allowance is £12,570 in 2021/22. National Insurance threshold is set at: <=£797 =0%, above £797 and <£4,189 =12% (per week). Council Tax is estimated using the Turn 2 reckoner. Savings less than £5k.

(c) Couple, 39 (F/T) and 38 years old (P/T), 2 children (Male and Female) and in good health $^{\rm 126}$

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Private renter -3 bedroom house in NE6 1AA @ £126.58pw

| | Unemployed and looking for work | In work | Change before and after pay increase | Change per week £ | % |
|---------------------------|---------------------------------------|------------|-----------------------------------------------|----------------------|-------|
| Income 1 | £0.00 | £19,552.00 | £19,552.00 | £376.00 | |
| Income 2 | £0.00 | £8,320.00 | £8,320.00 | £160.00 | |
| Total Gross Income | £0.00 | £27,872.00 | £27,872.00 | £536.00 | |
| National Insurance 1 | £0.00 | -£1,198.56 | -£1,198.56 | | |
| National Insurance 2 | £0.00 | £0.00 | £0.00 | | |
| Pension 1 (4%) | £0.00 | -£782.08 | -£782.08 | | |
| Pension 2 (4%) | £0.00 | -£332.80 | -£332.80 | | |
| | £0.00 | £25,558.56 | £25,558.56 | £491.51 | |
| Income tax 1 | £0.00 | -£1,396.40 | -£1,396.40 | | |
| Income tax 2 | £0.00 | £0.00 | £0.00 | | |
| | £0.00 | £24,162.16 | £24,162.16 | £464.66 | |
| Universal Credit | £18,115.24 | £8,330.92 | -£9,784.32 | | |
| Child Benefit | £1,885.00 | £1,885.00 | £0.00 | | |
| Before Council Tax credit | £20,000.24 | £34,378.08 | £14,377.84 | £276.50 | 71.9% |
| Council Tax Credit | £1,401.92 | £0.00 | -£1,401.92 | | |
| DISPOSABLE INCOME | £21,402.16 | £34,378.08 | £12,975.92 | £249.54 | 60.6% |

126 Source: https://www.turn2us.org.uk/

Couple, 39 and 38 years old in good health with 2 children, male and female, 11 years old. Privately renting a 3 bedroom house @ £126.58pw and house is in Council Tax band B. Both enrol in a pension scheme contributing 4% of gross income. Tax allowance for each is £12,570 in 2021/22 and the National Insurance threshold is: <=£797 =0%, above £797 and <£4,189 =12% (per week). Council Tax is estimated using the Turn 2 reckoner and the household has savings of less than £5k. The household has no childcare costs.

(d) Couple, 39 (F/T) and 38 years old (P/T), 2 children (Male and Female) and in good health $^{\rm 127}$

Renting a 3 bedroom house in NE6 1AA @ £82.35pw from the local authority

| | Unemployed and looking for work | In work | Change before and after pay increase | Change per week £ | % |
|---------------------------|---------------------------------------|------------|-----------------------------------------------|----------------------|-------|
| Income 1 | £0.00 | £19,552.00 | £19,552.00 | £376.00 | |
| Income 2 | £0.00 | £8,320.00 | £8,320.00 | £160.00 | |
| Total Gross Income | £0.00 | £27,872.00 | £27,872.00 | £536.00 | |
| National Insurance 1 | £0.00 | -£1,198.56 | -£1,198.56 | | |
| National Insurance 2 | £0.00 | £0.00 | £0.00 | | |
| Pension 1 (4%) | £0.00 | -£782.08 | -£782.08 | | |
| Pension 2 (4%) | £0.00 | -£332.80 | -£332.80 | | |
| | £0.00 | £25,558.56 | £25,558.56 | £491.51 | |
| Income tax 1 | £0.00 | -£1,396.40 | -£1,396.40 | | |
| Income tax 2 | £0.00 | £0.00 | £0.00 | | |
| | £0.00 | £24,162.16 | £24,162.16 | £464.66 | |
| Universal Credit | £17,005.56 | £6,030.96 | -£10,974.60 | | |
| Child Benefit | £1,885.00 | £1,885.00 | £0.00 | | |
| Before Council Tax credit | £18,890.56 | £32,078.12 | £13,187.56 | £253.61 | 69.8% |
| Council Tax Credit | £1,401.92 | £0.00 | -£1,401.92 | | |
| DISPOSABLE INCOME | £20,292.48 | £32,078.12 | £11,785.64 | £226.65 | 58.1% |

127 Source: https://www.turn2us.org.uk/

Couple, 39 and 38 years old in good health with 2 children, male and female, 11 years old. Renting from the local authority a 3 bedroom house @ £82.35pw and house is in Council Tax band B. Both enrol in a pension scheme contributing 4% of gross income. Tax allowance for each is £12,570 in 2021/22 and the National Insurance threshold is: <=£797 =0%, above £797 and <£4,189 =12% (per week). Council Tax is estimated using the Turn 2 reckoner and the household has savings of less than £5k. The household has no childcare costs.

Appendix 2. Annual average household incomes, taxes and benefits of NON-RETIRED individuals by all decile groups, 2019/20¹²⁸ (Extension of exhibit 2.5 to include income deciles 6 to 10)

| | Decile 1 | Decile 2 | Decile 3 | Decile 4 | Decile 5 | Decile 6 | Decile 7 | Decile 8 | Decile 9 | Decile 10 | Average/ Total |
|----------------------------------------------------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-------------------|
| Income from wages, salaries, pensions, annuities, investments and other | £9,948 | £18,683 | £26,228 | £34,674 | £42,816 | £51,631 | £62,106 | £75,702 | £92,387 | £205,712 | £61,989 |
| Total cash benefits | £5,793 | £8,087 | £7,431 | £6,059 | £4,886 | £3,822 | £3,063 | £1,970 | £1,767 | £1,859 | £4,473 |
| Gross income | £15,741 | £26,770 | £33,659 | £40,733 | £47,702 | £55,453 | £65,169 | £77,672 | £94,154 | £207,571 | £66,462 |
| Total direct taxes (income tax, Council Tax, NI) | £4,097 | £3,857 | £5,235 | £6,953 | £8,399 | £10,669 | £13,640 | £17,044 | £22,322 | £69,913 | £16,211 |
| Disposable income | £11,644 | £22,913 | £28,424 | £33,780 | £39,303 | £44,784 | £51,529 | £60,628 | £71,832 | £137,658 | £50,251 |
| Total indirect taxes (e.g. VAT, duty etc) | £4,650 | £5,575 | £5,917 | £6,472 | £8,025 | £7,397 | £9,361 | £9,184 | £10,872 | £11,314 | £7,880 |
| Post-tax income | £6,994 | £17,338 | £22,507 | £27,308 | £31,278 | £37,387 | £42,168 | £51,444 | £60,960 | £126,344 | £42,371 |
| Benefits in kind (e.g. NHS, education, travel subsidy, childcare) | £13,918 | £16,085 | £13,566 | £13,977 | £13,523 | £9,916 | £10,827 | £9,121 | £9,225 | £7,390 | £11,755 |
| Final income | £20,912 | £33,423 | £36,073 | £41,285 | £44,801 | £47,303 | £52,995 | £60,565 | £70,185 | £133,734 | £54,126 |

Appendix 3. Details of the impact on disposable income of increases in gross income from work summarised in exhibit 2.6

Exhibit 2.6 takes the four illustrative household types used in exhibit 2.2 and shows the impact on disposable income of a series of increases in gross income from wages, starting with a 20% increase and going up to 100%. The tables below show the detailed workings for each of these increases for two of the cases: single adult and 2 adult, 2 children households in social rent.

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Case 1 - Single adult in social rented property

Single, 39 years old, no dependents and in good health¹²⁹
Renting from a local authority a 1 bed flat in NE6 1AA @ £64.91pw

| | In work | 20% increase | Change before and after pay increase | Change per week £ | % |
|---------------------------|------------|-----------------|-----------------------------------------------|----------------------|-------|
| Income | £8,320.00 | £9,984.00 | £1,664.00 | £32.00 | 20.0% |
| National Insurance | £0.00 | -£50.40 | -£50.40 | | |
| Pension (4%) | -£332.80 | -£399.36 | -£66.56 | | |
| | £7,987.20 | £9,534.24 | £1,547.04 | £29.75 | 19.4% |
| Income tax | £0.00 | £0.00 | £0.00 | | |
| | £7,987.20 | £9,534.24 | £1,547.04 | £29.75 | 19.4% |
| Universal Credit | £3,001.44 | £2,130.96 | -£870.48 | | |
| Before Council Tax credit | £10,988.64 | £11,665.20 | £676.56 | £13.01 | 6.2% |
| Council Tax Credit | £850.72 | £500.76 | -£349.96 | | |
| DISPOSABLE INCOME | £11,839.36 | £12,165.96 | £326.60 | £6.28 | 2.8% |

129 Source: https://www.turn2us.org.uk/

Notes: Single, 39 years old in good health with no caring demands; renting a local authority owned 1 bedroom flat @£64.91 pw and flat is in Council Tax band A. In a pension scheme -contributes 4% of gross income. Tax free allowance is £12,570 in 2021/22. National Insurance threshold is set at: <=£797 =0%, above £797 and <£4,189 =12% (per week). Council Tax is estimated using the Turn 2 reckoner. Savings less than £5k.
(b) Single, 39 years old, no dependents and in good health¹³⁰ Renting from a local authority a 1 bed flat in NE6 1AA @ £64.91pw

| | In work | 40% increase | Change before and after pay increase | Change per week £ | % |
|---------------------------|------------|-----------------|-----------------------------------------------|----------------------|-------|
| Income | £8,320.00 | £11,648.00 | £3,328.00 | £64.00 | 40.0% |
| National Insurance | £0.00 | -£250.08 | -£250.08 | | |
| Pension (4%) | -£332.80 | -£465.92 | -£133.12 | | |
| | £7,987.20 | £10,932.00 | £2,944.80 | £56.63 | 36.9% |
| Income tax | £0.00 | £0.00 | £0.00 | | |
| | £7,987.20 | £10,932.00 | £2,944.80 | £56.63 | 36.9% |
| Universal Credit | £3,001.44 | £1,373.32 | -£1,628.12 | | |
| Before Council Tax credit | £10,988.64 | £12,305.32 | £1,316.68 | £25.32 | 12.0% |
| Council Tax Credit | £850.72 | £500.76 | -£349.96 | | |
| DISPOSABLE INCOME | £11,839.36 | £12,806.08 | £966.72 | £18.59 | 8.2% |

130 Source: https://www.turn2us.org.uk/

Notes: Single, 39 years old in good health with no caring demands; renting a local authority owned 1 bedroom flat @£64.91 pw and flat is in Council Tax band A. In a pension scheme -contributes 4% of gross income. Tax free allowance is £12,570 in 2021/22. National Insurance threshold is set at: <=£797 =0%, above £797 and <£4,189 =12% (per week). Council Tax is estimated using the Turn 2 reckoner. Savings less than £5k.

Single, 39 years old, no dependents and in good health¹³¹
Renting from a local authority a 1 bed flat in NE6 1AA @ £64.91pw

| | In work | 60% increase | Change before and after pay increase | Change per week £ | % |
|---------------------------|------------|-----------------|-----------------------------------------------|----------------------|-------|
| Income | £8,320.00 | £13,312.00 | £4,992.00 | £96.00 | 60.0% |
| National Insurance | £0.00 | -£449.76 | -£449.76 | | |
| Pension (4%) | -£332.80 | -£532.48 | -£199.68 | | |
| | £7,987.20 | £12,329.76 | £4,342.56 | £83.51 | 54.4% |
| Income tax | £0.00 | £0.00 | £0.00 | | |
| | £7,987.20 | £12,329.76 | £4,342.56 | £83.51 | 54.4% |
| Universal Credit | £3,001.44 | £695.76 | -£2,305.68 | | |
| Before Council Tax credit | £10,988.64 | £13,025.52 | £2,036.88 | £39.17 | 18.5% |
| Council Tax Credit | £850.72 | £500.76 | -£349.96 | | |
| DISPOSABLE INCOME | £11,839.36 | £13,526.28 | £1,686.92 | £32.44 | 14.2% |

131 Source: https://www.turn2us.org.uk/

Notes: Single, 39 years old in good health with no caring demands; renting a local authority owned 1 bedroom flat @£64.91 pw and flat is in Council Tax band A. In a pension scheme -contributes 4% of gross income. Tax free allowance is £12,570 in 2021/22. National Insurance threshold is set at: <=£797 =0%, above £797 and <£4,189 =12% (per week). Council Tax is estimated using the Turn 2 reckoner. Savings less than £5k.

Single, 39 years old, no dependents and in good health¹³²
Renting from a local authority a 1 bed flat in NE6 1AA @ £64.91pw

| | In work | 80% increase | Change before and after pay increase | Change per week £ | % |
|---------------------------|------------|-----------------|-----------------------------------------------|----------------------|-------|
| Income | £8,320.00 | £14,976.00 | £6,656.00 | £128.00 | 80.0% |
| National Insurance | £0.00 | -£649.44 | -£649.44 | | |
| Pension (4%) | -£332.80 | -£599.04 | -£266.24 | | |
| | £7,987.20 | £13,727.52 | £5,740.32 | £110.39 | 71.9% |
| Income tax | £0.00 | -£231.50 | -£231.50 | | |
| | £7,987.20 | £13,496.02 | £5,508.82 | £105.94 | 69.0% |
| Universal Credit | £3,001.44 | £122.20 | -£2,879.24 | | |
| Before Council Tax credit | £10,988.64 | £13,618.22 | £2,629.58 | £50.57 | 23.9% |
| Council Tax Credit | £850.72 | £250.12 | -£600.60 | | |
| DISPOSABLE INCOME | £11,839.36 | £13,868.34 | £2,028.98 | £39.02 | 17.1% |

132 Source: https://www.turn2us.org.uk/

Notes: Single, 39 years old in good health with no caring demands; renting a local authority owned 1 bedroom flat @£64.91 pw and flat is in Council Tax band A. In a pension scheme -contributes 4% of gross income. Tax free allowance is £12,570 in 2021/22. National Insurance threshold is set at: <=£797 =0%, above £797 and <£4,189 =12% (per week). Council Tax is estimated using the Turn 2 reckoner. Savings less than £5k.

(e) Single, 39 years old, no dependents and in good health¹³³ Renting from a local authority a 1 bed flat in NE6 1AA @ £64.91pw

| | In work | 100% increase | Change before and after pay increase | Change per week £ | % |
|---------------------------|------------|------------------|-----------------------------------------------|----------------------|--------|
| Income | £8,320.00 | £16,640.00 | £8,320.00 | £160.00 | 100.0% |
| National Insurance | £0.00 | -£849.12 | -£849.12 | | |
| Pension (4%) | -£332.80 | -£665.60 | -£332.80 | | |
| | £7,987.20 | £15,125.28 | £7,138.08 | £137.27 | 89.4% |
| Income tax | £0.00 | -£511.06 | -£511.06 | | |
| | £7,987.20 | £14,614.22 | £6,627.02 | £127.44 | 83.0% |
| Universal Credit | £3,001.44 | £0.00 | -£3,001.44 | | |
| Before Council Tax credit | £10,988.64 | £14,614.22 | £3,625.58 | £69.72 | 33.0% |
| Council Tax Credit | £850.72 | £250.12 | -£600.60 | | |
| DISPOSABLE INCOME | £11,839.36 | £14,864.34 | £3,024.98 | £58.17 | 25.6% |

Notes: Single, 39 years old in good health with no caring demands; renting a local authority owned 1 bedroom flat @£64.91 pw and flat is in Council Tax band A. In a pension scheme -contributes 4% of gross income. Tax free allowance is £12,570 in 2021/22. National Insurance threshold is set at: <=£797 =0%, above £797 and <£4,189 =12% (per week). Council Tax is estimated using the Turn 2 reckoner. Savings less than £5k.

Case 2: 2 adults, 2 child household in social rented property

Couple, 39 (F/T) and 38 years old (P/T), 2 children (Male and Female) and in good health¹³⁴
Renting from a local authority a 3 bedroom house in NE6 1AA @ £82.35pw

| | In work | 20% increase | Change before and after pay increase | Change per week £ | % |
|---------------------------|------------|-----------------|-----------------------------------------------|----------------------|-------|
| Income 1 | £19,552.00 | £23,462.40 | £3,910.40 | £75.20 | 20.0% |
| Income 2 | £8,320.00 | £8,320.00 | £0.00 | £0.00 | |
| Total Gross Income | £27,872.00 | £31,782.40 | £3,910.40 | £75.20 | 14.0% |
| National Insurance 1 | -£1,198.56 | -£1,667.81 | -£469.25 | | |
| National Insurance 2 | £0.00 | £0.00 | £0.00 | | |
| Pension 1 (4%) | -£782.08 | -£938.50 | -£156.42 | | |
| Pension 2 (4%) | -£332.80 | -£332.80 | £0.00 | | |
| | £25,558.56 | £28,843.30 | £3,284.74 | £63.17 | 12.9% |
| Income tax 1 | -£1,396.40 | -£2,178.48 | -£782.08 | | |
| Income tax 2 | £0.00 | £0.00 | £0.00 | | |
| | £24,162.16 | £26,664.82 | £2,502.66 | £48.13 | 10.4% |
| Universal Credit | £6,030.96 | £4,681.56 | -£1,349.40 | | |
| Child Benefit | £1,885.00 | £1,885.00 | £0.00 | | |
| Before Council Tax credit | £32,078.12 | £33,231.38 | £1,153.26 | £22.18 | 3.6% |
| Council Tax Credit | £0.00 | £0.00 | £0.00 | | |
| DISPOSABLE INCOME | £32,078.12 | £33,231.38 | £1,153.26 | £22.18 | 3.6% |

134 Source: https://www.turn2us.org.uk/

Couple, 39 and 38 years old in good health with 2 children, male and female, 11 years old. Renting from a local authority a 3 bedroom house @ £82.35pw and house is in Council Tax band B. Both enrol in a pension scheme contributing 4% of gross income. Tax allowance for each is £12,570 in 2021/22 and the National Insurance threshold is: <=£797 =0%, above £797 and <£4,189 =12% (per week). Council Tax is estimated using the Turn 2 reckoner and the household has savings of less than £5k. The household has no childcare costs.

(b) Couple, 39 (F/T) and 38 years old (P/T), 2 children (Male and Female) and in good health¹³⁵
Renting from a local authority a 3 bedroom house in NE6 1AA @ £82.35pw

| | In work | 40% increase | Change before and after pay increase | Change per week £ | % |
|---------------------------|------------|-----------------|-----------------------------------------------|----------------------|-------|
| Income 1 | £19,552.00 | £27,372.80 | £7,820.80 | £150.40 | 40.0% |
| Income 2 | £8,320.00 | £8,320.00 | £0.00 | £0.00 | |
| Total Gross Income | £27,872.00 | £35,692.80 | £7,820.80 | £150.40 | 28.1% |
| National Insurance 1 | -£1,198.56 | -£2,137.06 | -£938.50 | | |
| National Insurance 2 | £0.00 | £0.00 | £0.00 | | |
| Pension 1 (4%) | -£782.08 | -£1,094.91 | -£312.83 | | |
| Pension 2 (4%) | -£332.80 | -£332.80 | £0.00 | | |
| | £25,558.56 | £32,128.03 | £6,569.47 | £126.34 | 25.7% |
| Income tax 1 | -£1,396.40 | -£2,960.56 | -£1,564.16 | | |
| Income tax 2 | £0.00 | £0.00 | £0.00 | | |
| | £24,162.16 | £29,167.47 | £5,005.31 | £96.26 | 20.7% |
| Universal Credit | £6,030.96 | £3,331.64 | -£2,699.32 | | |
| Child Benefit | £1,885.00 | £1,885.00 | £0.00 | | |
| Before Council Tax credit | £32,078.12 | £34,384.11 | £2,305.99 | £44.35 | 7.2% |
| Council Tax Credit | £0.00 | £0.00 | £0.00 | | |
| DISPOSABLE INCOME | £32,078.12 | £34,384.11 | £2,305.99 | £44.35 | 7.2% |

Couple, 39 and 38 years old in good health with 2 children, male and female, 11 years old. Renting from a local authority a 3 bedroom house @ £82.35pw and house is in Council Tax band B. Both enrol in a pension scheme contributing 4% of gross income. Tax allowance for each is £12,570 in 2021/22 and the National Insurance threshold is: <=£797 =0%, above £797 and <£4,189 =12% (per week). Council Tax is estimated using the Turn 2 reckoner and the household has savings of less than £5k. The household has no childcare costs.

(c) Couple, 39 (F/T) and 38 years old (P/T), 2 children (Male and Female) and in good health¹³⁶
Renting from a local authority a 3 bedroom house in NE6 1AA @ £82.35pw

| | In work | 60% increase | Change before and after pay increase | Change per week £ | % |
|---------------------------|------------|-----------------|-----------------------------------------------|----------------------|-------|
| Income 1 | £19,552.00 | £31,283.20 | £11,731.20 | £225.60 | 60.0% |
| Income 2 | £8,320.00 | £8,320.00 | £0.00 | £0.00 | |
| Total Gross Income | £27,872.00 | £39,603.20 | £11,731.20 | £225.60 | 42.1% |
| National Insurance 1 | -£1,198.56 | -£2,606.30 | -£1,407.74 | | |
| National Insurance 2 | £0.00 | £0.00 | £0.00 | | |
| Pension 1 (4%) | -£782.08 | -£1,251.33 | -£469.25 | | |
| Pension 2 (4%) | -£332.80 | -£332.80 | £0.00 | | |
| | £25,558.56 | £35,412.77 | £9,854.21 | £189.50 | 38.6% |
| Income tax 1 | -£1,396.40 | -£3,742.64 | -£2,346.24 | | |
| Income tax 2 | £0.00 | £0.00 | £0.00 | | |
| | £24,162.16 | £31,670.13 | £7,507.97 | £144.38 | 31.1% |
| Universal Credit | £6,030.96 | £1,982.24 | -£4,048.72 | | |
| Child Benefit | £1,885.00 | £1,885.00 | £0.00 | | |
| Before Council Tax credit | £32,078.12 | £35,537.37 | £3,459.25 | £66.52 | 10.8% |
| Council Tax Credit | £0.00 | £0.00 | £0.00 | | |
| DISPOSABLE INCOME | £32,078.12 | £35,537.37 | £3,459.25 | £66.52 | 10.8% |

Couple, 39 and 38 years old in good health with 2 children, male and female, 11 years old. Renting from a local authority a 3 bedroom house @ £82.35pw and house is in Council Tax band B. Both enrol in a pension scheme contributing 4% of gross income. Tax allowance for each is £12,570 in 2021/22 and the National Insurance threshold is: <=£797 =0%, above £797 and <£4,189 =12% (per week). Council Tax is estimated using the Turn 2 reckoner and the household has savings of less than £5k. The household has no childcare costs.

(d) Couple, 39 (F/T) and 38 years old (P/T), 2 children (Male and Female) and in good health¹³⁷
Renting from a local authority a 3 bedroom house in NE6 1AA @ £82.35pw

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| | In work | 80% increase | Change before and after pay increase | Change per week £ | % |
|---------------------------|------------|-----------------|-----------------------------------------------|----------------------|-------|
| Income 1 | £19,552.00 | £35,193.60 | £15,641.60 | £300.80 | 80.0% |
| Income 2 | £8,320.00 | £8,320.00 | £0.00 | £0.00 | |
| Total Gross Income | £27,872.00 | £43,513.60 | £15,641.60 | £300.80 | 56.1% |
| National Insurance 1 | -£1,198.56 | -£3,075.55 | -£1,876.99 | | |
| National Insurance 2 | £0.00 | £0.00 | £0.00 | | |
| Pension 1 (4%) | -£782.08 | -£1,407.74 | -£625.66 | | |
| Pension 2 (4%) | -£332.80 | -£332.80 | £0.00 | | |
| | £25,558.56 | £38,697.50 | £13,138.94 | £252.67 | 51.4% |
| Income tax 1 | -£1,396.40 | -£4,524.72 | -£3,128.32 | | |
| Income tax 2 | £0.00 | £0.00 | £0.00 | | |
| | £24,162.16 | £34,172.78 | £10,010.62 | £192.51 | 41.4% |
| Universal Credit | £6,030.96 | £632.84 | -£5,398.12 | | |
| Child Benefit | £1,885.00 | £1,885.00 | £0.00 | | |
| Before Council Tax credit | £32,078.12 | £36,690.62 | £4,612.50 | £88.70 | 14.4% |
| Council Tax Credit | £0.00 | £0.00 | £0.00 | | |
| DISPOSABLE INCOME | £32,078.12 | £36,690.62 | £4,612.50 | £88.70 | 14.4% |

Couple, 39 and 38 years old in good health with 2 children, male and female, 11 years old. Renting from a local authority a 3 bedroom house @ £82.35pw and house is in Council Tax band B. Both enrol in a pension scheme contributing 4% of gross income. Tax allowance for each is £12,570 in 2021/22 and the National Insurance threshold is: <=£797 =0%, above £797 and <£4,189 =12% (per week). Council Tax is estimated using the Turn 2 reckoner and the household has savings of less than £5k. The household has no childcare costs.

(e) Couple, 39 (F/T) and 38 years old (P/T), 2 children (Male and Female) and in good health¹³⁸
Renting from a local authority a 3 bedroom house in NE6 1AA @ £82.35pw

| | In work | 100% increase | Change before and after pay increase | Change per week £ | % |
|---------------------------|------------|------------------|-----------------------------------------------|----------------------|--------|
| Income 1 | £19,552.00 | £39,104.00 | £19,552.00 | £376.00 | 100.0% |
| Income 2 | £8,320.00 | £8,320.00 | £0.00 | £0.00 | |
| Total Gross Income | £27,872.00 | £47,424.00 | £19,552.00 | £376.00 | 70.1% |
| National Insurance 1 | -£1,198.56 | -£3,544.80 | -£2,346.24 | | |
| National Insurance 2 | £0.00 | £0.00 | £0.00 | | |
| Pension 1 (4%) | -£782.08 | -£1,564.16 | -£782.08 | | |
| Pension 2 (4%) | -£332.80 | -£332.80 | £0.00 | | |
| | £25,558.56 | £41,982.24 | £16,423.68 | £315.84 | 64.3% |
| Income tax 1 | -£1,396.40 | -£5,306.80 | -£3,910.40 | | |
| Income tax 2 | £0.00 | £0.00 | £0.00 | | |
| | £24,162.16 | £36,675.44 | £12,513.28 | £240.64 | 51.8% |
| Universal Credit | £6,030.96 | £0.00 | -£6,030.96 | | |
| Child Benefit | £1,885.00 | £1,885.00 | £0.00 | | |
| Before Council Tax credit | £32,078.12 | £38,560.44 | £6,482.32 | £124.66 | 20.2% |
| Council Tax Credit | £0.00 | £0.00 | £0.00 | | |
| DISPOSABLE INCOME | £32,078.12 | £38,560.44 | £6,482.32 | £124.66 | 20.2% |

138 Source: https://www.turn2us.org.uk/

Couple, 39 and 38 years old in good health with 2 children, male and female, 11 years old. Renting from a local authority a 3 bedroom house @ £82.35pw and house is in Council Tax band B. Both enrol in a pension scheme contributing 4% of gross income. Tax allowance for each is £12,570 in 2021/22 and the National Insurance threshold is: <=£797 =0%, above £797 and <£4,189 =12% (per week). Council Tax is estimated using the Turn 2 reckoner and the household has savings of less than £5k. The household has no childcare costs.

Appendix 4. Newcastle upon Tyne public transport maps

Map 1 Newcastle Upon Tyne city centre





Appendix 5. Household expenditure per head on groceries and utilities by income decile¹³⁹



Appendix 6. Incomes, housing, transport and utility costs in the study areas

Table 1: Household gross, net and residual income after transport and utilities costs in Newcastle upon Tyne LA in 2018¹⁴⁰

(Data arranged by average net income after housing costs (equivalised) after transport and utilities cost)

| Il income Average net income after housing costs (equivalised) after transport and utilities cost | ъ | 13,020 | 15,177 | 19,533 | 26,811 | 19,649 |
|------------------------------------------------------------------------------------------------------------------------|---|--------------|--------|--------------|----------------|--------------|
| Residua Average net income after housing costs (equivalised) after transport cost | ъ | 14,375 | 16,575 | 20,923 | 28,366 | 21,124 |
| | | | | | | |
| Average annual utilities spend | ы | 1,355 | 1,398 | 1,389 | 1,554 | 1,475 |
| Average annual transport spend | ы | 2,025 | 2,425 | 2,677 | 3,434 | 2,938 |
| | | | | | | |
| Average net income after housing costs (Data equivalised) | £ | 16,400 | 19,000 | 23,600 | 31,800 | 24,062 |
| Average net income (Unequivalised) | £ | 21,600 | 24,700 | 29,000 | 39,000 | 28,842 |
| Average total (gross) income (Unequivalised) | ч | 24,700 | 29,200 | 35,100 | 52,500 | 35,503 |
| | | Walker South | Byker | Heaton South | South Gosforth | Newcastle LA |

¹⁴⁰ Source: Income estimates for small areas, England & Wales, financial year ending 2018, ONS, and Stat-xplore.dwp.gov.uk, DWP database

Table 2: Household gross, net and residual income after transport and utilities costs in North Tyneside LA in 2018¹⁴¹ (Data arranged by average net income after housing costs (equivalised) after transport and utilities cost)

| | Average total (gross) income | Average net income | Average net income | Average annual | Average annual | Residual Averade net | income Averade net |
|------------------|---------------------------------|-----------------------|-------------------------------------------------|--------------------|--------------------|---------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| | (Unequivalised) | (Unequivalised) | after housing costs (Data equivalised) | transport spend | utilities spend | income after housing costs (equivalised) after transport cost | income after housing costs (equivalised) after transport and utilities cost |
| | £ | £ | ъ | ъ | ы | £ | ы |
| nirton | 29,000 | 24,700 | 18,400 | 2,651 | 1,430 | 15,749 | 14,319 |
| ercy Main | 30,200 | 27,800 | 20,500 | 2,663 | 1,416 | 17,837 | 16,422 |
| orth Shields | 34,500 | 29,100 | 24,000 | 3,368 | 1,520 | 20,632 | 19,112 |
| hitley Sands | 52,600 | 40,100 | 34,200 | 3,805 | 1,631 | 30,395 | 28,764 |
| orth Tyneside LA | 37,071 | 30,044 | 25,821 | 3,280 | 1,535 | 22,541 | 21,006 |

Table 3: Household gross, net and residual income after transport and utilities costs in Northumberland CC in 2018¹⁴²

(Data arranged by average net income after housing costs (equivalised) after transport and utilities cost)

| ncome Average net income after nousing costs (equivalised) after transport and utilities cost | н. | 15,929 | 17,485 | 31,888 | 21,721 |
|--------------------------------------------------------------------------------------------------------------------|----|--------------|------------|-------------------------|----------------------|
| Residual i Average net income after housing costs (equivalised) after transport cost | н. | 17,342 | 18,994 | 33,530 | 23,261 |
| Average annual utilities spend | н. | 1,414 | 1,510 | 1,643 | 1,540 |
| Average annual transport spend | ц. | 2,458 | 3,206 | 3,670 | 3,239 |
| Average net income after housing costs (Data equivalised) | H | 19,800 | 22,200 | 37,200 | 26,500 |
| Average net income (Unequivalised) | H. | 25,000 | 25,200 | 44,600 | 30,478 |
| Average total (gross) income (Unequivalised) | ц. | 25,800 | 31,600 | 53,800 | 37,645 |
| | | Blyth Cowpen | Blyth Town | Morpeth South & West | Northumberland CC |

142 Source: Income estimates for small areas, England & Wales, financial year ending 2018, ONS, and Stat-xplore.dwp.gov.uk, DWP database











