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A report commissioned by the Coalfields Regeneration Trust

STATE OF THE	SCOTTISH	COALFIELDS

Economic and social conditions in Scotland's former coalfields

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Summary

This report reviews social and economic conditions in Scotland's former coalfields. In particular it draws on newly published local statistics from the 2022 Scottish Census of Population. It also draws on a range of other official statistics. The coalfields themselves are accurately defined down at neighbourhood level.

It is difficult to generalise across the Scottish coalfields, so figures are usually presented separately for each of the three main coalfield areas – Ayrshire/Lanarkshire, Fife and Lothian. Comparisons are also made with the Scottish and GB averages.

Population

Scotland's former coalfields have a combined population of 560,000, which is roughly one-in-ten of the Scottish population. The population has been growing strongly in Lothian but much less so in Ayrshire/Lanarkshire and Fife. The coalfield population is distinctly older than in Edinburgh or Glasgow.

Health

Health problems are widespread. In Ayrshire/Lanarkshire and Fife almost 10 per cent of all adults report 'bad or very bad health' and around 10 per cent of all residents claim disability benefits.

Jobs

The number of jobs in the former Scottish coalfields has been growing – up 29,000 between 2012 and 2022 – but in relation to the size of the local working-age population the growth has not been unduly impressive. The Scottish coalfields have largely missed out on the rapid growth in warehousing employment that has marked a number of the English coalfields. The 'job density' – the number of jobs in the coalfields per 100 residents of working age – remains well below the Scottish average.

Commuting

One consequence of the low job density in Scotland's former coalfields is that there is substantial net out-commuting – an estimated 39,000.

Job quality

More than half of all employed residents in Scotland's former coalfields work in manual jobs – rather more than the Scottish average – but median hourly earnings of residents in full-time work are in line with Scottish and GB averages.

Qualifications

In Ayrshire/Lanarkshire and Fife, only just over a quarter of 16-64 year olds have degree-level qualifications, compared to over half in Edinburgh. This is most likely driven by the number and nature of the jobs on offer in the coalfields and by out-migration among the young and better-qualified.

Unemployment

On the UK government's preferred measure, unemployment in Scotland's former coalfields is now in line with the Scottish and GB averages. On the other hand, in the Ayrshire/Lanarkshire and Fife coalfields the 'employment rate' – the share of working age adults in employment – is four percentage points below the Scottish average and seven percentage points below the rate in South East England.

Out-of-work benefits

Although recorded unemployment is low, a total of 58,000 16-64 year olds in Scotland's former coalfields claim out-of-work benefits of one kind or another. That's 18 per cent of all adults of working age in Fife, 17 per cent in Ayrshire/Lanarkshire and 14 per cent in Lothian. A particularly high incapacity benefit claimant rate contributes to these numbers.

Deprivation

In Ayrshire/Lanarkshire, 45 per cent of coalfield neighbourhoods are in the most deprived 30 per cent in Scotland. In Fife the proportion is 50 per cent. Lothian is somewhat less deprived at 30 per cent.

The report also looks more closely at four 'pit villages' (Benarty, Dalmellington, Drongan and Prestonpans). The first three of these demonstrate that there are places within the former coalfields that still display acute social and economic disadvantage. Prestonpans, in Lothian, presents a more mixed picture attributable in part to overspill from Edinburgh that has helped dilute the statistics on local disadvantage.

The report concludes that the statistics for the Ayrshire/Lanarkshire and Fife coalfields continue to reflect substantial distress. In the Lothian coalfield, large numbers of incomers have shifted the statistics but there are still likely to be communities, households and individuals who still face acute disadvantage.

Whilst Scotland's coalfields have moved on since the job losses of the 1980s and 90s the pace of change has been uneven and this is not a moment to walk away from coalfield regeneration. Properly rebuilding the economic and social base of communities can take decades and it is clear that in Scotland's former coalfields the job is not yet complete.

1. INTRODUCTION

Scope and purpose of the report

The former coalfields are a distinctive part of Scotland. Their long history of mining moulded their economy, culture and landscape. It also shaped their settlement pattern because coal can only be mined where it is found and many mining towns and villages therefore grew up in places away from Scotland's big cities. Coalfield communities often relied on this single industry to an extraordinary extent.

It's now some years since coalmining ended in Scotland: the last deep mine, Longannet in Fife, closed in 2002, though opencast mining continued in Ayrshire until 2020. However, though the industry itself has disappeared the communities that were built around it are very much still in existence. This raises huge questions about the well-being of the people and places that once depended upon the coal industry. Indeed, the regeneration of former mining communities in Scotland and the rest of the UK has been a significant concern over many decades. Local authorities and successive governments have made major efforts and, in fairness, many of the physical scars of the industry have now been removed. Colliery sites have been cleared and pit heaps grassed over. But what about the mining communities themselves?

In a report commissioned by the Coalfields Regeneration Trust, published in April 2024, we took stock of economic and social conditions in Britain's former coalmining communities¹. Deploying a wide range of official statistics, the report updated and extended previous reports published in 2014² and 2019³. However, at the time the 2024 update was undertaken a number of key statistics from the Scottish Census of Population had not been released, reflecting the fact that in Scotland the Census was carried out in 2022, a year later than in England and Wales. This limited the up-to-date coverage of Scotland in the April 2024 report.

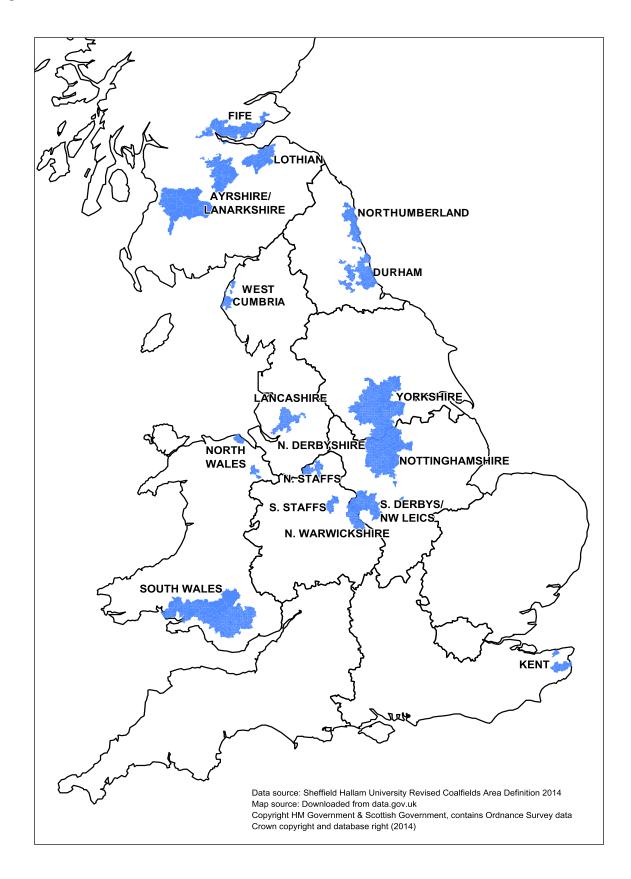
The present report combines newly released statistics from the Scottish Census with material from the earlier 2024 report to provide a distinctive and up-to-date focus on Scotland's former coalfield communities.

¹ S Fothergill, T Gore and D Leather (2024) *The State of the Coalfields 2024: economic and social conditions in the former coalfields of England, Scotland and Wales*, Centre for Regional Economic and Social Research (CRESR), Sheffield Hallam University.

² M Foden, S Fothergill and T Gore (2014) *The State of the Coalfields*, CRESR, Sheffield Hallam University.

³ C Beatty, S Fothergill and T Gore (2019) *The State of the Coalfields 2019,* CRESR, Sheffield Hallam University.

Figure 1: Location of the former coalfields



Defining Scotland's coalfields

One of the trickier problems is accurately defining Scotland's coalfields because, if we look far enough back in time, coalmining took place across a wide range of locations across much of the central belt.

Our starting point is the map first developed by Sheffield Hallam University in the 1990s⁴. This defined the coalfields as wards where in 1981 at least 10 per cent of male residents in employment worked in the coal industry⁵. The Sheffield Hallam map had the merit of defining the coalfields on the basis of labour market data just prior to the major job losses of the 1980s and 90s and it was subsequently deployed by the UK government in its 1998 *Coalfields Task Force* report⁶. Over the years the map has been revised⁷ and the building block has shifted from wards to Lower Super Output Areas in England and Wales and to datazones in Scotland – the finest grain at which most statistics are available. The present report uses this modified version of the Sheffield Hallam map.

On the basis of this definition, Britain's former coalfields are shown in Figure 1. The Sheffield Hallam map identifies three separate coalfields in Scotland:

- Ayrshire/Lanarkshire, which also includes Upper Nithsdale in Dumfries and Galloway and part of West Lothian. (The gap on the map between the Ayrshire and Lanarkshire parts is a sparsely populated upland area).
- *Fife*, which also includes neighbouring parts of Clackmannanshire and Stirling and a small area in Falkirk.
- Lothian, which includes the whole of Midlothian and parts of East Lothian.

What needs to be kept in mind is that this map of the Scottish coalfields excludes a number of areas in the central belt where coalmining ended before the 1980s.

On these boundaries, at the time of the 2022 Census the former Scottish coalfields had a combined population of 560,000. This represents just over 10 per cent of the population of Scotland (5,437,000). What is clear from these figures is that even on the relatively tight Sheffield Hallam definition, former coalfield communities account for a sizeable proportion of Scotland's present-day population. The population of Scotland's former coalfields is only a little less than the population of Glasgow City (620,000) and rather more than the population of Edinburgh (514,000).

⁴ C Beatty and S Fothergill (1996) 'Labour market adjustment in areas of chronic industrial decline: the case of the UK coalfields', *Regional Studies*, vol 30, pp 637-650.

⁵ In parts of England (Lancashire and North Staffordshire) where mining took place in a more urban context alongside other industries a slightly lower threshold was applied.

⁶ Department for the Environment, Transport and the Regions (1998) *Report of the Coalfields Task Force*, DETR, London.

⁷ To include former mining areas in North Wales that did not meet the original statistical criteria and to cover a small number of additional colliery sites in England undergoing restoration.

Population, 2022

Ayrshire/Lanarkshire coalfield	125,000
Fife coalfield	273,000
Lothian coalfield	162,000
Scottish coalfields	560,000

Source: Census of Population

By way of comparison, the former coalfields in England have a population of 4.4 million or 8 per cent of the population, and in Wales the former coalfields have a population of 780,000 or 25 per cent of the population8.

A note on statistics

As far as possible, all the statistics we present are based on datazones – broadly neighbourhoods, each with around 1,500 people. Where data at this geographical scale is available, for example from the 2022 Scottish Census of Population, the figures in the report therefore refer specifically to the coalfields, accurately defined, rather than to the wider local authority districts of which they form part.

Drawing on this data for neighbourhoods, we present separate figures for each of the three Scottish coalfields - Ayrshire/Lanarkshire, Fife and Lothian. This is important because there is substantial diversity in socio-economic conditions between the three, notably between Lothian and the other two. A statistical average for the three coalfields would be misleading and uninformative.

Some statistics, however, are not available at the neighbourhood/datazone scale. In these cases we present figures for the seven principal coalfield local authorities in Scotland⁹. The match with the coalfields themselves is imperfect and it is reasonable to assume that data for local authorities will understate the problems because some authorities also include more prosperous non-coalfield areas.

For most variables, comparisons are made with the averages for Scotland and for Great Britain as a whole. In a number of cases we also present data for Edinburgh and Glasgow, where comparisons with the cities are enlightening, or for London or South East England¹⁰, where comparisons within Scotland hide the extent to which the former coalfields lag behind the most prosperous parts of the UK.

^{8 2021} Census data.

⁹ Clackmannanshire, East Ayrshire, East Lothian, Fife, Midlothian, North Lanarkshire, South

¹⁰ Defined at regional level, excluding London.

2. THE STATISTICAL EVIDENCE

Population growth

That the population of Scotland's former coalfields has been increasing at a time when the population of the UK has been growing strongly is unsurprising.

	Population growth 2011-22	
	no. %	
Ayrshire/Lanarkshire coalfield	1,000	0.8
Fife coalfield	5,000	1.9
Lothian coalfield	18,000	12.5
Scotland	137,000	2.6
Great Britain	4,220,000	6.9

Sources: Census of Population and ONS mid-year population estimates

However, the figures immediately expose a key difference between the three coalfields. Whereas the population has been growing strongly in the former Lothian coalfield – faster than the GB average, and much faster than the Scottish average – in the Fife and Ayrshire/Lanarkshire coalfields the growth has been far slower. Indeed, in Ayrshire/Lanarkshire the population barely grew at all between 2011 and 2022.

It's not difficult to point to an explanation. The proximity of the former Lothian coalfield to Edinburgh and the strong growth of jobs and population in the latter has triggered substantial overspill in the form of new housing for commuters. This is evident on the ground, let alone in statistics. There has also been overspill from Edinburgh into the former Fife coalfield, particularly around Dunfermline, but this has been on a more limited scale. By contrast, the former coalfield communities of Ayrshire and Lanarkshire are far more remote from Scotland's cities.

In the Fife and Ayrshire/Lanarkshire coalfields the population growth has been slower than the average across Britain's former coalfields (up 3.3 per cent¹¹) and markedly slower than in either Glasgow or Edinburgh (up 4.5 and 7.6 per cent respectively¹²).

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¹¹ Source: Census of Population and ONS mid-year population estimates, 2011-21.

¹² Source: Census of Population 2011-22

Age structure

The age structure of the Scottish coalfield population is only marginally different from the Scottish and GB averages. Around one-in-five residents are aged 65 or over and just under one-in-five are aged under 16. Lothian has a slightly younger age structure than the other two coalfields, no doubt reflecting the in-movement of young families.

The age profile in Scotland's coalfields does however differ from the profile in either Edinburgh or Glasgow, where there are fewer under-16s and markedly fewer over-65s. This is a common pattern that can also be observed in England and Wales: in London, for example, the proportion aged 65+ is as low as 12 per cent¹³. The Scottish coalfield population is also getting older – the share aged 65+ rose by three percentage points between 2011 and 2022.

	% of population, 2022		
	Under 16	16-64	65+
Ayrshire/Lanarkshire coalfield	17	62	20
Fife coalfield	17	62	21
Lothian coalfield	18	63	19
Scotland	16	64	20
Edinburgh	15	70	16
Glasgow	15	71	14
GB average*	18	63	19

*2021

Source: Census of Population

The older population of the Scottish coalfields is evident too within the working-age population. The share of young adults (16-34) is far lower than in the big cities. For every two young adults in the Scottish coalfields there are three in either Edinburgh or Glasgow.

% of population aged 16-34, 2022

Ayrshire/Lanarkshire coalfield	21
Fife coalfield	22
Lothian coalfield	22
Scotland	24
Edinburgh	32
Glasgow	33
GB average*	24

*2021

Source: Census of Population

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¹³ Source: Census of Population 2021.

Across Britain as a whole the differences in population growth and in age structure mainly reflect migration and there are two flows that impact strongly on the former coalfields. One is the loss of younger adults to other parts of the country. The younger and better qualified have always tended to move to places where jobs are more readily available, away from more difficult labour markets such as the former coalfields. In the last twenty years or so the flow has been compounded by the expansion of higher education which has diverted large numbers of young adults from the coalfields, where there are few universities, towards the cities.

The other important migration flow is from outside the UK. International migrants too tend to be younger adults of working age and in recent years the UK has experienced a substantial net inflow of migrants from abroad. The share of the population born outside the UK offers a guide to these flows.

Compared to the England and Wales average, and especially London, Scotland as a whole and the Scottish coalfields in particular have relatively few residents born outside the UK. In Ayrshire/Lanarkshire, for example, the proportion is just 4 per cent – a distinctly low figure by contemporary UK standards, though not uniquely so.

	Residents born outside the UK, 2022		
	% of total pop.	% point increase 2011-22	
Ayrshire/Lanarkshire coalfield	i 4	1.4	
Fife coalfield	6	2.1	
Lothian coalfield	8	3.2	
Scotland	9	3.3	
England & Wales*	17	3.4	
London*	41	4.1	

*2021 and 2011-21 data Source: Census of Population

In 2022, a total of just 34,000 Scottish coalfield residents were born outside the UK, though this figure had increased by 14,000 since 2011. Just under 12,000 of the increase was among adults of working age (16-64).

Life expectancy

It has long been known that Scotland has a problem of low life expectancy. Putting aside East Lothian, where the former mining area is only a small part of the authority, average life expectancy at birth in all the main local authorities covering the Scottish coalfields is at or below the Scottish average. If figures were available at neighbourhood level the suspicion must be that life expectancy in the former coalfields, accurately defined, would be still lower.

More striking, even on the basis of figures for local authorities the average life expectancy in Scotland's former coalfields is around three years less than GB average and around five years less than in South East England. This disparity applies to both men and women, and amongst men it cannot be attributed solely to the impact of working in the coal industry because as time has passed relatively few residents are ex-miners, though there is no doubt that working in the coal industry was often damaging to health.

Average years life expectancy at birth, 2020-22

men	women
75	80
75	80
79	82
77	81
77	81
75	79
76	80
77	81
79	83
81	85
	75 75 79 77 77 75 76

Sources: ONS and National Records Scotland

Strikingly too, life expectancy in the authorities covering the Scottish coalfields appears to be no higher in the most recent figures (for 2020-22) than in the figures for 2009-2011.

Health

The Census of Population provides a useful measure of self-declared health. This is the proportion of residents aged 16+ reporting 'bad or very bad health'. Scotland as a whole is unusually bad on this indicator – the incidence of poor health is well above the average in England and Wales – but the Ayrshire/Lanarkshire and Fife coalfields are even worse than the Scottish average, with approaching one-in-ten adults reporting bad or very bad health.

% of 16+ population reporting 'bad or very bad health' 2022

Ayrshire/Lanarkshire coalfield	9.9
Fife coalfield	9.4
Lothian coalfield	7.5
Scotland	8.2
England & Wales average*	5.2
South East England*	4.2

*2021

Source: Census of Population

The extent of poor health is underlined by the numbers claiming disability benefits. In Scotland these are those who receive Disability Living Allowance (DLA) or its replacement Personal Independence Payment (PIP), plus those who have been switched to or are new claimants of the two new Scottish benefits, Adult Disability Benefit and Child Disability Benefit. These are welfare benefits paid to help offset the costs of care and/or mobility arising from disability. Among the working age population, they are claimed by individuals both in work and out-of-work and they are also paid to substantial numbers above state pension age.

In 2023, approaching 10 per cent of the entire population of the former Scottish coalfields – 52,000 people – were disability claimants¹⁴. This proportion is far higher than the GB average and almost twice as high as in South East England.

% of residents claiming disability benefits, 2023

Ayrshire/Lanarkshire coalfield	10.0
Fife coalfield	9.7
Lothian coalfield	8.2
Scotland	8.2
GB average	7.7
South East England	5.8

Sources: DWP, Scottish Government

Job numbers

The UK government's Business Register and Employment Survey (BRES) provides figures on the number of jobs located in the former coalfields. Because of commuting flows these figures are not the same as the number of coalfield residents in employment, which is considered later. The BRES figures exclude the self-employed.

The most recent BRES data available at the time of writing, for 2022, shows that at that point 183,000 jobs were located in Scotland's former coalfields. This represents just over 7 per cent of the Scotlish total. 98,000 of these jobs were in the Fife coalfield, 51,000 in Lothian and 34,000 in Ayrshire/Lanarkshire.

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¹⁴ The numbers here combine DWP data on DLA and PIP claimants for September 2023, by datazone, with data claimants of the new Scottish benefits for June 2023, estimated for coalfields from local authority numbers using age-based population weightings.

The decade to 2022 was a period of strong job growth across the UK economy. The BRES data shows that between 2012 and 2022 the number of employee jobs in the former Scottish coalfields increased by a total of 29,000¹⁵. This represents a healthy percentage increase, especially in Lothian. In Fife and in Ayrshire/Lanarkshire the percentage increase was nearer the GB average though still ahead of the average for Scotland as a whole.

Increase in	employee	iobs. 2	012-2022
IIICI Case II	i cilibio acc	IUUS, Z	.0 12-2022

	no.	%
Ayrshire/Lanarkshire coalfield	4,000	13
Fife coalfield	12,000	15
Lothian coalfield	13,000	31
Scotland	190,000	8
Great Britain	4,020,000	15

Source: BRES

Expressed in relation to the size of the working age population the job growth in Scotland's former coalfields was less impressive. This is partly because the high percentage increase in the number of jobs reflects a low starting base. It is also because the former coalfields, in Scotland and elsewhere in Britain, export large numbers of commuters to surrounding areas. Growth in the number of jobs can therefore seem impressive in relation to the stock of jobs but not in relation to the size of the local workforce. Indeed, in relation to the local workforce the job growth in Ayrshire/Lanarkshire and in Fife was actually slower than the GB average. Even in Lothian it was only marginally faster.

Increase in employee jobs as % pop aged 16-64, 2012-2022

Ayrshire/Lanarkshire coalfield	5
Fife coalfield	8
Lothian coalfield	12
Scotland	6
GB average	10

Source: BRES

Taking Britain as a whole, a key part of the increase of employment in the former coalfields has been the growth of warehousing. The recent expansion is remarkable: employment in warehousing in Britain's former coalfields grew by more than 60,000 between 2012 and 2022, to the point where warehousing is now beginning to match the number of jobs in the coal industry itself just prior to the 1984/5 miners strike.

In the Scottish coalfields the growth in warehousing jobs has been more subdued than in England – a net increase of just under 3,500 between 2012 and 2022, mostly in Fife, or about one-in-eight of the new employee jobs in the Scottish coalfields over this period.

¹⁵ A proportion of the increase (perhaps 4-5,000) is attributable to changes in taxation rules in 2020-21 that reduced the number recorded as self-employed and increased the number of employees.

Employee jobs in warehousing & wholesale, 2022 No. Increase 2012-22

Former coalfields		
Yorkshire	59,250	26,250
Lancashire	20,000	5,500
Nottinghamshire	18,000	8,000
Durham	12,000	5,000
North Derbyshire	11,000	2,000
North Warwickshire	10,500	4,500
North Staffordshire	10,000	1,500
S Derbys / NW Leics	9,000	2,500
South Staffordshire	8,000	4,000
Fife	6,500	2,900
South Wales	6,250	- 500
Lothian	1,575	- 40
Ayrshire / Lanarkshire	1,500	610
Northumberland	1,400	925
West Cumbria	550	120
Kent	425	25
North Wales	275	- 25
All former coalfields	176,000	62,000

Source: BRES

The relatively modest growth in warehousing in the Scottish coalfields (and indeed in Wales) is not difficult to explain. Employers have opted for national distribution depots in central locations within Britain, accessible to the motorway network, which has pointed to Yorkshire, the Midlands and Lancashire, where it has helped that many former colliery sites have been cleared and made available for development. More remote locations were never going to be the first choice except for small-scale local distribution.

Looking at the private sector as a whole, Scotland's former coalfields have a relatively modest stock of businesses. In relation to the population, the number of businesses in all three coalfields is below the average for Scotland and even further below the GB average.

Private enterprises per 10,000 population, 2023

Ayrshire/Lanarkshire coalfield	271
Fife coalfield	226
Lothian coalfield	258
Scotland	313
GB average	407

Source: ONS

The relative weakness of the economy in the Scottish coalfields is reflected in the 'job density' – the ratio between the number of employee jobs and the local working age population. All Britain's former coalfields, without exception, have a job density below the GB average (75 per 100 working age residents). In Fife the figure is 58, in Lothian 50 and in Ayrshire/Lanarkshire 44.

No. of employee jobs in area per 100 residents of working age, 2022

Former coalfields	
S Derbys / NW Leics	65
N Derbyshire	64
Lancashire	64
N Warwickshire	63
S Staffordshire	63
Yorkshire	63
Nottinghamshire	61
Fife	58
Durham	53
West Cumbria	51
N Staffordshire	51
Lothian	50
North Wales	48
South Wales	46
Northumberland	45
Kent	44
Ayrshire / Lanarkshire	44
Scotland	73
GB average	75

Sources: BRES, Census of Population

Commuting

Of course, the former coalfields do not exist in isolation from surrounding places. They are part of complex networks of commuting, particularly into neighbouring towns and cities, so there is no requirement for the stock of jobs in the coalfields themselves to match the local labour supply. Commuting clearly helps explain the low job density in Lothian for example, where large numbers travel into Edinburgh. But a low job density can also be a symptom of a weak local economy: if many people travel out of the area for work, this can be because there are so few jobs closer to home.

It is hard to put a precise figure on the scale of commuting from the Scottish coalfields but a reasonable estimate is possible:

- There are 183,000 employee jobs in the former Scottish coalfields¹⁶. Adding in the self-employed brings the estimated total number of jobs in the coalfields up to 199,000¹⁷.
- The overall employment rate among 16-64 year olds of 68 per cent¹⁸ in the former Scottish coalfields points to 238,000 residents in work.
- The difference between these figures 39,000 is attributable to net commuting out of the coalfields.

The figure here for 'net commuting' is the balance between flows in each direction and is equivalent to one-in-six of all coalfield residents in work. The outflow from the coalfields will be substantially larger, offset by a smaller inflow from other areas. The total number of outcommuters from the Scottish coalfields can't be calculated – the data doesn't allow this – but seems likely to be one-in-four or one-in-five of all residents in employment.

Replicating the same calculations points to high levels of net out-commuting not only from the Lothian coalfield (mostly into Edinburgh) but also from the Ayrshire/Lanarkshire coalfield, where the main destinations are likely to include Ayr, Kilmarnock, Motherwell and Hamilton given the considerable distances to Glasgow. The Fife coalfield is also a net exporter of commuters but on a smaller scale, in absolute terms and in relation to the size of the local workforce.

Esti	nated net out-commuting, 2022
no.	as % of all employed residents

Ayrshire/Lanarkshire coalfield	14,000	28
Fife coalfield	8,000	7
Lothian coalfield	17,000	23

Source: Sheffield Hallam University estimates based on BRES and Census of Population

Once more it needs to be emphasised that these are *net commuting* figures. The daily outflow from each coalfield will be larger, balanced in part by an inflow from surrounding areas.

Job quality

A widespread view is that too much employment in the UK has become skewed towards part-time and insecure working, including debased forms of self-employment, and that these forms of employment have become particularly prevalent in weaker local economies such as the former coalfields. The hard evidence is mixed.

¹⁶ Source: BRES

¹⁷ Source: Census of Population ¹⁸ Source: Census of Population

For example, self-employment in Scotland's former coalfields is broadly in line with the Scottish and GB averages.

Self-employed as % of 16-64 yr. old residents in employment, 2022

Ayrshire/Lanarkshire coalfield	14
Fife coalfield	12
Lothian coalfield	14
Scotland	14
GB average*	12

*2021 APS data

Source: Census of Population

Part-time working is high but close to the Scottish average and not far above the GB average.

Part-time working as % of all employees, 2022

Ayrshire/Lanarkshire coalfield	36
Fife coalfield	34
Lothian coalfield	33
Scotland	33
GB average	31

Source: BRES

The composition of local jobs is distinctive¹⁹. In Ayrshire/Lanarkshire and in Fife, manufacturing provides 18 and 10 per cent respectively of all jobs, compared to just 7 per cent across Scotland as a whole. Conversely, finance and business services account for just 6 per cent of jobs in Fife and 5 per cent in Ayrshire/Lanarkshire, compared to 12 per cent for Scotland as a whole. The Lothian coalfield is different: it has fewer jobs in manufacturing (7 per cent) and more in finance and business services (14 per cent), no doubt reflecting overspill from Edinburgh.

In all three former coalfield areas, public services account for around a third of all jobs, broadly in line with the Scottish average.

The former Scottish coalfields remain heavily dependent on manual jobs. In Ayrshire/Lanarkshire and in Fife, manual jobs account for well over half of all employed residents. In Lothian the share is around half. The dependence on manual jobs is clearest in comparison with the most prosperous part of Britain – London and the South East – where the proportion in manual work is far lower.

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¹⁹ Source: BRES

% of employed residents in manual jobs, 2022

Ayrshire/Lanarkshire coalfield	58
Fife coalfield	57
Lothian coalfield	51
Scotland	50
GB average*	46
South East England*	40
London*	36

^{*2021} data

Source: Census of Population

The UK government's Annual Survey of Hours and Earnings (ASHE) – the main source of official data on pay – doesn't allow the coalfields to be accurately identified at neighbourhood level, necessitating the use of local authority data. These figures show that the median hourly earnings for residents are broadly in line with the Scottish and GB averages, though some way behind the level in Edinburgh²⁰. As a guide specifically to coalfield communities within each local authority, the figures do however need to be treated with caution.

Median hourly earnings of residents in full-time work, 2021-23 GB average = 100

Coalfield local authorities	
Clackmannanshire	100
East Ayrshire	102
East Lothian	101
Fife	99
Midlothian	101
North Lanarkshire	101
South Lanarkshire	106
Scotland	102
Edinburgh	109
Glasgow	102

Source: ASHE

Qualifications

The share of working-age coalfield residents with degree-level qualifications is below the Scottish average, especially so in Ayrshire/Lanarkshire and Fife. It is also still further below the average in Scotland's big cities, particularly Edinburgh.

²⁰ To help overcome fluctuations in the ASHE data arising from sampling error, the figures presented here are three-year averages for 2021-23.

% of 16-64 yr. old residents with degree-level* qualifications, 2022

Ayrshire/Lanarkshire coalfield	26
Fife coalfield	28
Lothian coalfield	33
Scotland	36
Edinburgh	53
Glasgow	38

*NVQ level 4 equivalent or above Source: Census of Population

It's difficult to attribute the shortfall to failures in the local education system. Rather, the driving factor is likely to be the quality and quantity of jobs on offer, because areas with a high proportion of manual jobs, such as the former coalfields, are unlikely to retain or attract highly qualified workers, who move to the places where higher-grade jobs are more plentiful. One of the main mechanisms through which this occurs is when young people move away to university and then stay away when they move into employment, stripping the coalfields of successive cohorts of bright, well-qualified youngsters.

Unemployment

Commentators have been keen to flag up that over the last few years the UK has experienced lower unemployment than at any time since the mid-1970s. On the International Labour Organisation (ILO) measure, now the basis for official unemployment statistics, these observations are certainly correct. The ILO measure, based on survey data, counts the numbers out-of-work who have looked for a job in the last four weeks and are ready to start a job in the next two weeks. The Census of Population – the basis for the local coalfield data presented here – uses a slightly different version of the ILO measure²¹.

Unemployment (% of economically active 16-64s), 2022

Ayrshire/Lanarkshire coalfield	3.5
Fife coalfield	3.8
Lothian coalfield	2.5
Scotland	3.6
GB average*	3.8

*2023 APS data

Source: Census of Population

²¹ Out-of-work, looking for work, available to start work in two weeks.

The Census figures for 2022 confirm that unemployment, as officially measured, is now low in all three Scottish coalfields – between 2 and 4 per cent of all economically active 16-64 year olds. This is not out of line with either the Scottish or GB averages. By comparison, the equivalent figures for 2011 were 7.5 per cent in Lothian, 9.4 per cent in Ayrshire/Lanarkshire and 10 per cent in Fife. At first sight, this low unemployment is a remarkable achievement considering quite how many jobs were lost from the coal industry over many years.

The problem is that ILO unemployment and its Census variant are both very poor measures of worklessness or of the strength of local labour markets, especially in the former coalfields.

The 'employment rate' – the share of adults of working age in employment – is in many respects better but a complication is that students in higher education distort the figures. Students are heavily concentrated in university towns, where they lower the employment rate, but there are few higher education institutions in the coalfields so a simple comparison of overall employment rates is misleading. The best statistic is therefore the employment rate excluding students²².

Employment rate (%) of 16-64 yr. olds, excluding students, 2022

Ayrshire/Lanarkshire coalfield	
Fife coalfield	75
Lothian coalfield	82
Scotland	79
GB average*	80
South East England*	82

*2023 APS data

Source: Census of Population

This casts a different light on the Scottish coalfields. In the Lothian coalfield the employment rate is relatively high – above the Scottish and GB averages indeed. In Ayrshire/Lanarkshire and in Fife, however, the employment rate lags behind – four percentage points behind the Scottish average, five behind the GB average, and seven behind the level in South East England. These shortfalls in the employment rate allow simple but telling calculations:

- To raise the employment rate in the Ayrshire/Lanarkshire coalfield to the Scottish average would require 3,000 additional residents to be in work. To raise the rate to the level in South East England (a guide to what is achievable in a fully-employed economy) would require 5,000 additional residents in work.
- To raise the employment rate in the Fife coalfield to the Scottish average would require 7,000 additional residents in work. To raise the rate to the level in South East England would require 12,000 additional residents in work.

That's a total of 10,000 extra residents in work in Ayrshire/Lanarkshire and Fife to match the Scottish average, and 17,000 to achieve something near full employment.

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²² Excluding all students, including those in part-time employment.

The 'economic inactivity rate' – the share of 16-64 year olds who are neither in employment nor unemployed – emphasises that the former coalfields in Fife and in Ayrshire/Lanarkshire continue to experience substantially above-average levels of worklessness.

Economic inactivity rate (%) of 16-64 yr. olds, excluding students, 2022

Ayrshire/Lanarkshire coalfield	21	
Fife coalfield	21	
Lothian coalfield	16	
Scotland	18	
GB average*	16	
South East England*	14	

*2023, APS data

Source: Census of Population

Out-of-work benefits

That the former coalfields in Scotland and the UK more generally are still a long way from full employment is underlined by the number of working age adults (16-64) on out-of-work benefits. The figures here combine the unemployed, the long-term sick or disabled and those out of the labour market with caring responsibilities, mainly for small children.

As the GB-wide *State of the Coalfields* report noted²³, in the autumn of 2023 the headline GB total was a huge 5.46 million. In the former coalfields alone, 590,000 men and women of working age were on out-of-work benefits. In terms of the out-of-work claimant rate, the former coalfields of England, Scotland and Wales were on average more than three percentage points above the national average and more than seven percentage points above South East England.

All three Scottish coalfields share this above average out-of-work claimant rate. In the former Fife coalfield, at 18.5 per cent of all 16-64 year olds, 31,000 men and women of working age were on out-of-work benefits. In the Ayrshire/Lanarkshire coalfield, at 16.8 per cent, there were a further 13,000. And in the Lothian coalfield, at 14.6 per cent, there were another 14,000. In total, across all the former coalfields of Scotland, accurately defined, in the autumn of 2023 a formidable total of 58,000 men and women of working age were out-of-work on benefits of one kind or another. There is no reason to suppose that this number will have since fallen much if at all.

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²³ S Fothergill, T Gore and D Leather (2024) op. cit.

Overall out-of-work benefit claimant rate²⁴, September 2023 % of 16-64 yr. olds

Former coalfields	
South Wales	19.2
Durham	19.2
Fife	18.5
Northumberland	17.6
North Staffordshire	17.2
West Cumbria	17.1
Lancashire	16.9
Ayrshire/Lanarkshire	16.8
Yorkshire	16.0
North Derbyshire	15.7
Nottinghamshire	15.4
Nottinghamshire Lothian	15.4 14.6
_	
Lothian	14.6
Lothian North Wales	14.6 14.5
Lothian North Wales North Warwickshire	14.6 14.5 13.3
Lothian North Wales North Warwickshire Kent	14.6 14.5 13.3 13.2
Lothian North Wales North Warwickshire Kent South Staffordshire	14.6 14.5 13.3 13.2 12.9
Lothian North Wales North Warwickshire Kent South Staffordshire	14.6 14.5 13.3 13.2 12.9
Lothian North Wales North Warwickshire Kent South Staffordshire S Derbys/NW Leics	14.6 14.5 13.3 13.2 12.9 10.4
Lothian North Wales North Warwickshire Kent South Staffordshire S Derbys/NW Leics Scotland average	14.6 14.5 13.3 13.2 12.9 10.4

Source: DWP

One of the reasons why the out-of-work claimant rate is so high is that the coalfields have substantial numbers on incapacity benefits. This has been known for some while. It became apparent in the wake of the pit closures in the 1980s and 1990s that the main labour market response to coal job losses was not an increase in recorded unemployment but rather a surge in the number of men who withdrew from the labour market into 'economic inactivity', mainly on incapacity benefits. Initially, many of the additional incapacity claimants were ex-miners but through competition for jobs the claims spread more widely as worklessness often came to rest with the less healthy in the workforce.

Over time, competition for jobs spread the claims to women as well. Over time, too, the exminers have gradually dropped out of the incapacity numbers – the vast majority have now reached state pension age or passed on. However, in difficult labour markets where poor health is often widespread, they have been replaced on benefits by the generations behind them. The former coalfields are not unique in this respect – other older industrial areas show the same trends – but they are arguably the prime example.

In the autumn of 2023 there were just over 400,000 incapacity claimants in Britain's former coalfields, accounting for 11 per cent, or one-in-nine of all adults of working age. This claimant rate was almost double the rate in South East England.

²⁴ Universal Credit not in employment (Sept 2023), plus Employment and Support Allowance, IB/SDA, JSA and IS claimants of working age (Aug 2023). There is a small overlap between UC and ESA claimants (c.125,000 across GB as a whole) which inflates the total.

% of 16-64 yr. olds claiming incapacity benefits²⁵, September 2023

Ayrshire/Lanarkshire coalfield	12.6
Fife coalfield	13.0
Lothian coalfield	10.9
Scotland average	10.1
GB average	8.1
South East England	5.8

Source: DWP

In all three Scottish coalfields the incapacity claimant rate exceeds 10 per cent – 22,000 men and women in Fife, 11,000 in Lothian and 10,000 in Ayrshire/Lanarkshire – a total of 43,000 out-of-work on incapacity benefits.

The significance of the high incapacity claimant rate in the former coalfields is that some of these men and women with health problems and/or disabilities are in effect 'hidden unemployed'. This is evident from comparisons with the low incapacity claimant rate in the parts of Britain at or near full employment, even after adjusting for underlying differences in health and disability. A series of reports from Sheffield Hallam University have adjusted for this distortion to local unemployment figures. The most recent estimates, for 2022²⁶, suggest that across Britain as a whole 790,000 of those on incapacity benefits might be considered to be 'hidden unemployed' in that they could have been expected to be in work in a genuinely fully employed economy.

Estimated real level of unemployment (% of all 16-64 yr. olds), 2022

Coalfield local authorities	
Clackmannanshire	8.2
East Ayrshire	8.9
East Lothian	5.0
Fife	6.8
Midlothian	4.8
North Lanarkshire	8.0
South Lanarkshire	7.1
Scotland	6.4
GB average	5.8
South East England	3.8

Source: Sheffield Hallam University estimates based on ONS

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²⁵ Universal Credit health caseload plus ESA and IB/SDA claimants, including NI credits-only claimants.

²⁶ C Beatty, S Fothergill and T Gore (2022) *The Real Level of Unemployment 2022*, CRESR, Sheffield Hallam University.

Adjusting for this distortion, the 'real level of unemployment' in the former coalfields is considerably higher than the official figures and casts quite a different light on the state of the local labour market. On this wider measure, unemployment in most of the local authorities covering Scotland's former coalfields is not only much higher, but also a good deal higher than the Scottish and GB average.

What should be emphasised is that the 'hidden unemployed' in the coalfields and elsewhere are mostly not active jobseekers – the vast majority are men and women with health problems or disabilities who have given up on the possibility of finding suitable work. But they make up a significant proportion of the overall working age population in the former coalfields and the evidence supports the view that in more favourable labour market circumstances many of them would have been in work. It is notable for example that in the Lothian coalfield, where job opportunities are more plentiful because of the proximity of Edinburgh, the incapacity claimant rate is lower than in Fife or Ayrshire/Lanarkshire.

Deprivation

The Scottish Government produces highly sophisticated indices of deprivation that combine data covering incomes, employment, health, crime, environment and access to services, to provide estimates right down to neighbourhood (datazone) level.

The former coalfields in Scotland and elsewhere generally lack the acute segregation between rich and poor areas that at this scale often characterises cities, so relatively few coalfield neighbourhoods tend to be among the most deprived 10 per cent. Indeed, in the Scottish context local polarisation between rich and poor has meant that Glasgow dominates the worst 10 per cent of neighbourhoods. In the coalfields, poverty and deprivation tends to be more evenly spread across larger areas. The best guide to the extent of coalfield deprivation is therefore the share of neighbourhoods in the worst 30 per cent.

% of neighbourhoods in most deprived 30% in Scotland, 2020

Ayrshire/Lanarkshire coalfield	45
Fife coalfield	50
Lothian coalfield	30

Source: Indices of Deprivation

In the Fife coalfield, half of all neighbourhoods are among the 30 per cent most deprived in Scotland. In Ayrshire/Lanarkshire the proportion among the worst 30 per cent is a little less than half. In Lothian, 30 per cent of neighbourhoods are among the most deprived 30 per cent.

3. A CLOSER LOOK: FOUR PIT VILLAGES

The former coalfields cover a large swathe of Scotland. Within them a subset of places deserve a closer look. These are the places usually described as 'pit villages' – smaller settlements, often in a semi-rural setting, that usually owe their whole existence to the coal industry and where there was rarely much other significant business activity. The closure of the mines took away the reason-for-being of these places.

Below, we therefore take a closer look at four places²⁷:

Benarty, in Fife, is the name informally used to refer to the ex-mining towns of Ballingry and Lochore and the villages of Crosshill, Lochcraig and Glencraig. Benarty is located about twelve miles from Dunfermline and ten miles from Kirkcaldy and Glenrothes, the main towns in this part of Fife.

Dalmellington²⁸, in East Ayrshire, is a relatively isolated mining settlement some fifteen miles south of Ayr. The surrounding area included a number of small mines, all long closed, but opencast coalmining continued until much more recently, well into the 2000s.

Drongan, in East Ayrshire, lies around ten miles east of Ayr in an isolated location off the main A70. The Killoch and Barony collieries, both closed in the late 1980s, were key local employers. The Barony pithead gear, a distinctive A-frame, remains a prominent local landmark.

Prestonpans, in East Lothian around eight miles east of Edinburgh, is rather larger than a typical pit village – a town indeed, with a long and diverse history. Coalmining first took place in the area as far back as the 13th century. The deep mines around the town closed in the 1960s but opencast mining continued until the end of the 1990s and the nearby Cockenzie coal-fired power station remained in operation until 2013.

In the figures presented below, all four places are accurately defined on the basis of their constituent datazones.

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²⁷ These were selected by the Coalfields Regeneration Trust.

²⁸ The figures for Dalmellington also include the adjacent village of Bellsbank.

FOUR FORMER MINING COMMUNITIES - SELECTED LOCAL STATISTICS

	Benarty	Dalmellington	Drongan	Prestonpans	Scotland av.
Population	5,500	2,600	3,100	10,600	5.4m
Population growth 2011-2022	- 200	- 200	- 100	+ 1,500	+ 137,000
Residents reporting 'bad or very bad health' % of all residents aged 16+	14%	16%	11%	9%	8%
Disability (DLA/PIP) claimant rate % of all residents	16%	20%	12%	10%	8%
Employment rate % of all 16-64s	59%	58%	62%	74%	68%
Unemployment rate % of economically active aged 16+	5%	9%	7%	3%	4%
Economically inactive (excluding students) % of all aged 16+	44%	49%	41%	34%	38%
Incapacity benefit claimant rate % of all 16-64s	23%	22%	14%	16%	10%
Overall out-of-work benefit claimant rate % of all 16-64s	32%	34%	20%	22%	14%

Sources: 2022 Census of Population and 2023 DWP benefits data

The statistics for the first three of these communities – Benarty, Dalmellington and Drongan – paint an almost consistently disturbing picture:

- The local population is falling, in contrast to the growth across Scotland as a whole.
- The proportion of residents reporting 'bad or very bad health' is well above the Scottish average. In Dalmellington it's one-in six of all residents aged 16+.
- The disability benefit claimant rate is likewise well above the Scottish average.
- The employment rate among working age adults (16-64) is ten percentage points or more below the Scottish average.
- The incapacity benefit claimant rate is far above the Scottish average, especially in Benarty and Dalmellington.
- The overall out-of-work benefit claimant rate is 6 percentage points higher than the Scottish average in Drongan, 18 percentage points higher in Benarty and 20 percentage points higher in Dalmellington.

The only bright spot in the figures for these three places is that the unemployment rate²⁹ is modest, though still above the Scottish average.

The fourth of the former mining communities – Prestonpans – presents a different picture. Here there is still evidence of disadvantage: the disability claimant rate, the incapacity benefit claimant rate and the overall out-of-work benefit claimant rate are all above the Scottish average. But the local population has been growing strongly and the employment rate is much higher than in the other three former mining communities.

The explanation for the rather different figures for Prestonpans is undoubtedly its proximity to Edinburgh, which provides a ready source of jobs for commuters and has triggered substantial new housing development and the growth in population. In some respects, Prestonpans is now best understood as two rather different but overlapping communities: an older former mining town alongside a newer home for commuters. Prestonpans is not unique in this respect – the same dichotomy marks other places in the former Lothian coalfield – but it does mean that Prestonpans is different from former mining communities in most other parts of Scotland. It also means that, in statistical terms, the extent of disadvantage in Prestonpans is diluted.

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²⁹ Census definition (out-of-work, looking for work, ready to start in two weeks) which differs from the numbers claiming unemployment-related benefits.

4. ASSESSMENT

The former coalfields are a large and important part of Scotland. Even on the relatively tight boundaries deployed in this report, they are home to more than half a million people or about one-in-ten of the Scottish population. It's important not to lose sight of these big numbers.

But it's also difficult to generalise about the Scottish coalfields. The key distinction is between the Ayrshire/Lanarkshire and Fife coalfields on the one hand and the Lothian coalfield on the other.

The Ayrshire/Lanarkshire and Fife coalfields continue to display signs of substantial social and economic distress – for example low life expectancy, widespread poor health, a low employment rate, fewer highly qualified residents and high out-of-work benefit claimant rates. These disadvantages are reflected in the Scottish Indices of Deprivation, which place around half of their local neighbourhoods amongst the worst 30 per cent in Scotland.

It isn't the case that there has been no job growth in Ayrshire/Lanarkshire or in Fife to replace the jobs lost from the coal industry and other older industries. Over the decade to 2022, the 16,000 new jobs in these two former coalfields (4,000 in Ayrshire/Lanarkshire, 12,000 in Fife) represented important additions to their local economies. Nevertheless, the 'job density' in both these former coalfields remains much lower than the Scottish average and an above average share of the residents in work are employed in manual occupations. Out-commuting from the coalfields of Ayrshire/Lanarkshire and Fife also remains substantial.

On a range of statistics, the former Lothian coalfield looks different. Its population has been growing strongly, fewer residents report poor health and life expectancy is not as bad as in the other Scottish coalfields. The number of jobs in the Lothian coalfield has been increasing (up 13,000 between 2012 and 2022), the proportion of manual workers is lower and the share of residents with degree-level qualifications higher. In the Lothian coalfield the employment rate is above the Scottish and GB averages and while the numbers on out-of-work benefits remain large the claimant rate is lower than in Ayrshire/Lanarkshire or Fife.

It's not difficult to pinpoint what's happening here: the Lothian coalfield has become a destination for overspill from Edinburgh. Indeed, net out-commuting from the Lothian coalfield – the balance between outflows and inflows – is equivalent to almost a quarter of all employed residents. The consequence is that there are now in effect two parallel communities in the Lothian coalfield – the original residents (who may or may not work in Edinburgh) and large numbers of incomers (often commuters to Edinburgh though not necessarily of course). The effect is to shift statistical averages and, almost certainly, to dilute measured disadvantage.

What this means in practical terms is that even within the former Lothian coalfield there are likely to be communities, households and individuals who still face acute disadvantage. Just because their disadvantage is masked by more positive figures for the area as a whole does not make it any less serious.

Indeed, drilling down below the level of the coalfields as a whole is clearly important in order to understand the nature and extent of present-day disadvantage. The report's brief look at four 'pit villages' is a salutary reminder in this respect. In three of the villages (Benarty, Dalmellington and Drongan) several of the statistics are truly awful. That more than ten per cent of all adults in these communities should report 'bad or very bad health' is deeply concerning. That up to a third of all adults of working age are claiming out-of-work benefits of one kind or another is surely unacceptable. That population in these three communities is falling at a time when the Scottish and UK populations are growing is a sign that there are still deeply entrenched problems. In these three former mining communities the consequences of the loss of the coal industry are still being felt, even by generations that are too young to have ever worked in the industry.

In the fourth of the pit villages examined in the report – Prestonpans in Lothian – the statistics are not quite so bad. This is not because Prestonpans is a long-established town and markedly larger than the other three. As in the rest of the Lothian coalfield, it is almost certainly because proximity to Edinburgh has brought a new layer of population into the town, which has grown strongly over the last decade. If it were possible to strip out the layer of recent incomers from the statistics we might well still find many of the familiar coalfield problems of poor health, low life expectancy and high dependency on benefits.

In conclusion, Scotland's coalfields have moved on since the job losses of the 1980s and 90s. There has been progress in new job creation, more so in some places than others, and the former coalfields are emerging with new roles in regional economies. In the Lothian coalfield, cheek by jowl with Edinburgh, the pace of change has been faster than in Ayrshire/Lanarkshire or Fife. Indeed, in the latter two coalfields there is unequivocal evidence of continuing economic and social distress, across the coalfields as a whole and especially in some pit villages. Dig deep enough and at least some of the same problems are likely to be found in parts of Lothian too.

In particular, it is important not to be fooled by the apparently low unemployment now recorded in Scotland's former coalfields. The low unemployment figures are welcome but they are misleading because they only count those actively looking for work, whereas there are far higher numbers in total on out-of-work benefits.

This is not, therefore, a moment to walk away from coalfield regeneration. It would be wrong, as the figures presented in the report show, to regard the problems arising from the loss of the coal industry as a thing of the past. When the economic base of a community disappears, it casts a very long shadow. The problem is not resolved by grassing over old mine-workings, or by a few hundred new jobs where there were formerly thousands. Properly rebuilding the economic and social base of communities can take decades and it is clear that in Scotland's former coalfields the job is not yet complete.



The Coalfields Regeneration Trust is dedicated to building prosperity and opportunity in coalfield communities across Britain. The charity is the only organisation with the sole focus of improving the lives of the 560,000 people who live in Scotland's coalfield areas.

Our work across Britain is funded through a community wealth building model which sees our subsidiary CRT Property build industrial units for SMEs with the rental income reinvested into our charitable work. In Scotland, our work is mostly funded through a grant from the Scottish Government.

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