

Adroddiad Gwaelodlin Economaidd

Economic Baseline Report



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Approved by Cabinet: 17/03/2020
Publication Date: 17/03/2020

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Executive Summary

Background

During December 2019 and January 2020, research was undertaken by Ceredigion County Council into the local economy to help identify the main themes and challenges to growing the economy in the future. The main themes emerging from the Economic Baseline Report cover a broad range of socio-economic factors and are listed below. These will be used to help identify the priorities in the new Economic Strategy for Ceredigion 2020-2035.

Main Themes

- 1 Demographics**
Population trends, and in particular, the decrease in the working age population and increase in the 65+ population
- 2 Workforce**
Retaining the workforce including younger people; and high educational attainment levels
- 3 Working Patterns**
Changing work patterns, in particular the increase in those commuting out of the county and the decrease in those commuting into the county
- 4 Students**
Student population in Aberystwyth and the impact on the local economy
- 5 Businesses**
The large number of micro enterprises and self-employed in the county, and the so-called "missing middle". Strong businesses survival rates
- 6 Connectivity**
The ongoing need to develop digital infrastructure to support the local economy and consumer access
- 7 Rurality**
The ongoing challenges of rurality, in particular deprivation relating to access to services and housing
- 8 Language and Culture**
Ceredigion remains a bastion of Welsh culture and language
- 9 Earnings**
Earnings in the County are lower than average
- 10 Health and Wellbeing**
Ceredigion is seen as a healthy, safe and enjoyable place to live by residents and visitors

The county of Ceredigion covers an area of 1,900 km² and is mostly made up of agricultural land, open moorland or forestry, with the upland areas to the east forming a significant portion of the Cambrian Mountains. The main towns in the county are Aberystwyth (population 16,200), Cardigan (4,200), Lampeter (3,000), Llandysul (1,400), Aberaeron (1,300), and Tregaron (1,200).

Figure 1: Map of Ceredigion



The county has a variety of natural landscapes and habitats, and a high proportion of land recognised for its environmental value through official designations, including two internationally important wetland areas – the Dyfi estuary and Cors Caron, 14 special areas of conservation, around 100 sites of special scientific interest and seven national nature reserves.

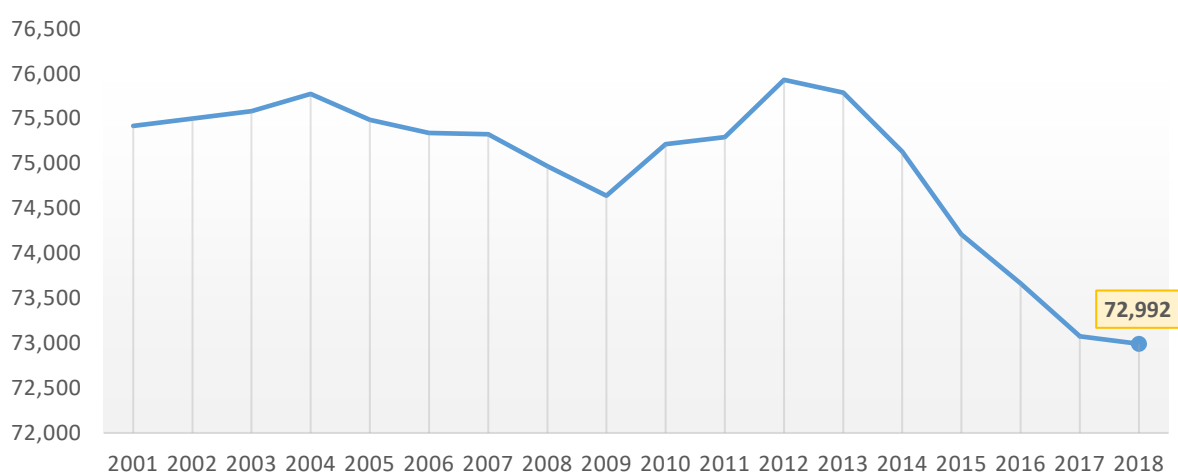
In the north, the county is bordered by Powys and to the south and east by Pembrokeshire and Carmarthenshire respectively. Running from Cardigan in the south to Glandyfi in the north, is 60km of the Wales Coastal Path in Ceredigion, providing residents and visitors with recreational opportunities.

The county is also the home to two universities - Aberystwyth University caters for some 8,000 students during term time and which has a strong reputation for research excellence and student satisfaction throughout the UK. Meanwhile, the University of Wales Trinity Saint David's Lampeter campus is the oldest University in Wales and is home to the University's Humanities courses.

Population

The population of Ceredigion according to the latest ONS Mid-Year Population estimates for 2018 is 72,992. There are various figures quoted in the media and other publications that suggest this is much higher, some as high as 78,000. However, since 2008 the size of Ceredigion's population has been regularly revised downwards, largely as a result of changes in the ONS methodology for allocating migrants to local areas and rebasing the mid-year estimates following the last Census. Figure 2 below shows the trend in Ceredigion's population over the last eighteen years. Over this period, the population has decreased by 3.2%, whereas the population of Wales has increased by 7.8%. Ceredigion's nearest neighbours - Carmarthenshire, Pembrokeshire and Powys - all witnessed an increase in their populations during the same period.

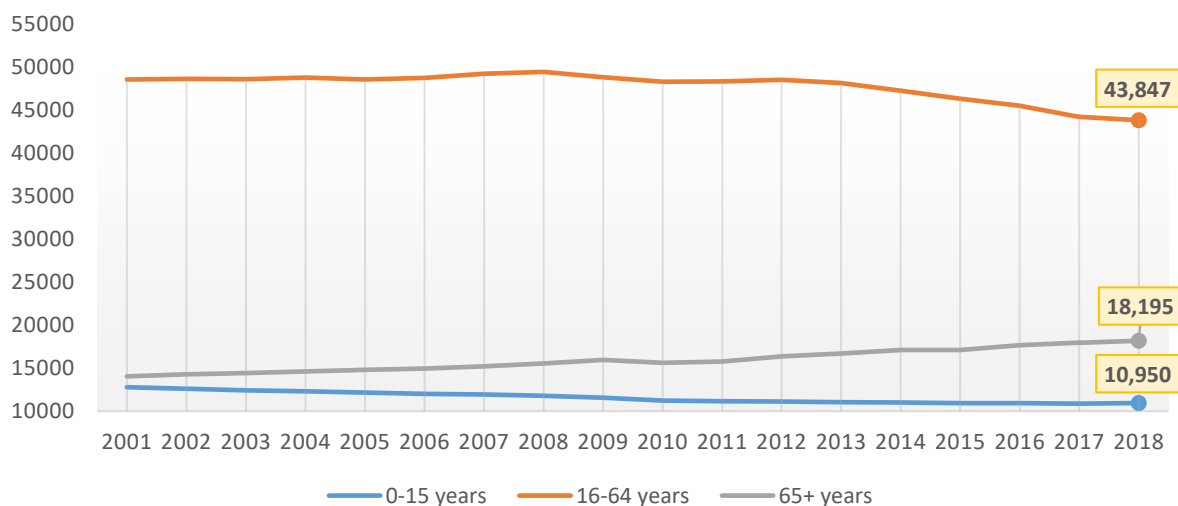
Figure 2: Population of Ceredigion 2001 - 2018



Age Structure

The median age of the county's population has increased from 42.9 in 2011 to 45.1 in 2018; in comparison, for Wales as a whole it has remained static at 41.5. The population of Ceredigion is ageing and, in 2018, 24.9% of the population is estimated to have been aged 65 and over. Trends show that the working age population (16-64) has decreased by 14% since 2001, while the 65+ population has increased significantly by 29.5%.

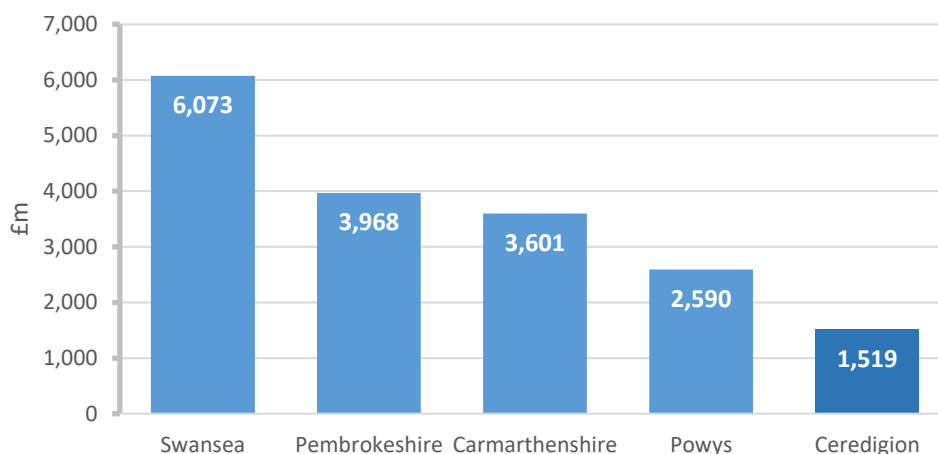
Figure 3: Age Structure of Ceredigion by 3 Key Age Groups



Gross Domestic Product

Gross domestic product or GDP is a measure of the size and health of an economy over a period of time by estimating the value of everything produced in the economy. The chart below shows the latest figures for 2018¹, demonstrating that the overall value of Ceredigion's economy is relatively low at £1,519m compared to other authorities in South and West Wales.

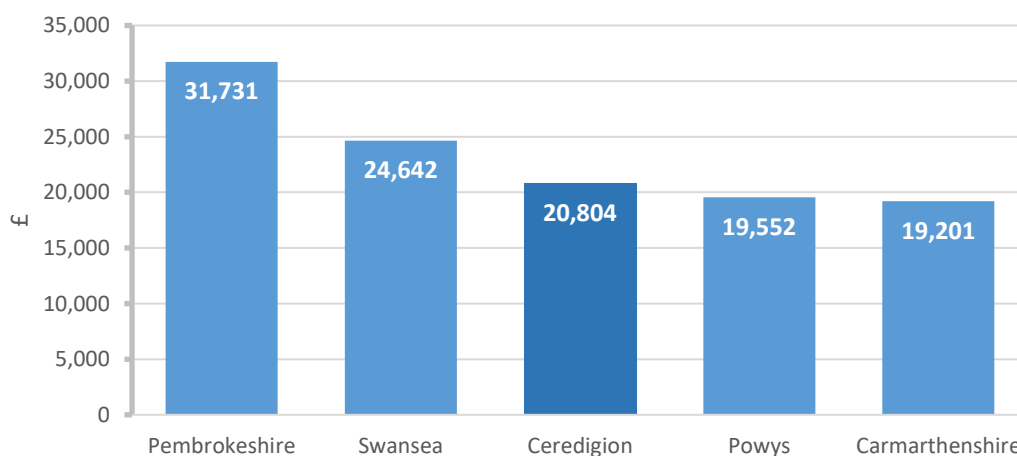
Figure 7: 2018 Gross Domestic Product (GDP) at current market prices



This is typical of many rural areas with relatively small populations – there tends to be a high proportion of jobs in tourism and hospitality, retail and health, and a relatively low number of jobs in manufacturing and high-value services. Self-employment is an important element in the local economy – many are farmers, with others working in a range of established small scale enterprises such as building and repair.

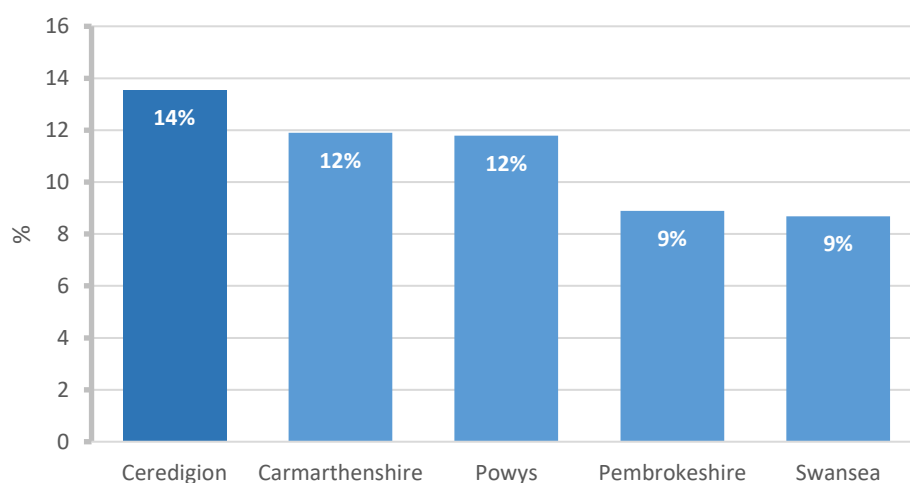
However, when GDP is compared *per head* of population, the situation is very different – Ceredigion's £20,804 is actually higher than that of neighbouring Powys (£19,552) and Carmarthenshire (£19,201).

Figure 8: 2018 Gross Domestic Product per head at current market prices



Furthermore, trends over the last five years show that Ceredigion actually has the largest growth in GDP amongst its nearest neighbours at 14%.

Figure 9: Percentage increase in GDP between 2014 - 2018



Gross Value Added

Gross Value Added or GVA is a measure of the value of goods and services in an area. It provides a value for the amount of goods and services produced in an economy after deducting the cost of inputs and raw materials that have gone into the production of those goods and services. The size of Ceredigion's local economy is estimated at gross value added (GVA) £1,342m. For the Mid and South West Wales region² it is estimated to be £14,471m and for Wales £65,089m.

GVA per head of population is a useful way of comparing regions of different sizes. Using the latest Office for National Statistics (ONS) estimates, GVA per head of population in Ceredigion in 2017 is £17,461 compared to a national figure of £19,899 per head. The county per head GVA is therefore 88% of the Wales average.

However, over the past five years, GVA per head has grown by 16.8% in Ceredigion compared to 15.7% for Wales as a whole. The same trend is visible over the longer term – in Ceredigion GVA increased by 79% between 1998 and 2017, higher than the 76% for Wales as a whole. This suggests that although GVA per head is lower for Ceredigion, the County has been narrowing the gap. Table 1 shows a breakdown of GVA per head of population for Mid and South West Wales compared to the national figures. (At the time of writing, the 2018 figures had not been published).

Table 1: Gross Value Added Per Head – Mid and South West Wales

	GVA Per head (£'s)						% Change	
	2012	2013	2014	2015	2016	2017	1998-2017	2012-2017
Wales	17,204	17,751	18,127	18,692	19,368	19,899	76.3%	15.7%
Ceredigion	14,951	16,363	16,162	17,269	17,992	17,461	79.1%	16.8%
Carmarthenshire	13,081	14,425	14,781	15,076	15,834	15,870	77.2%	21.3%
Pembrokeshire	18,125	16,039	16,439	17,382	17,087	18,427	73.7%	1.8%
Powys	15,863	16,653	16,687	17,400	17,759	17,734	57.3%	11.8%
Swansea	17,164	17,850	18,989	18,603	19,385	19,321	75.7%	12.6%
Ceredigion's % of Wales GVA	87%	92%	89%	92%	93%	88%		

Business Profile

Table 2 shows the size of the size profile of establishments in Ceredigion and Wales in 2019, and clearly demonstrates how the vast majority (92.0%) of enterprises in the County are 'micro' size, i.e. up to 9 employees. This figure rises to 99% when 'small' enterprises of 10-49 employees are included, and is not dissimilar to the 98.3% for Wales as a whole. Only 1% of enterprises in Ceredigion have fifty or more employees. This has given rise to the so called 'missing middle', i.e. the lack of medium sized enterprises and those smaller enterprises expanding into this category.

Table 2: Business counts for Ceredigion and Wales 2019

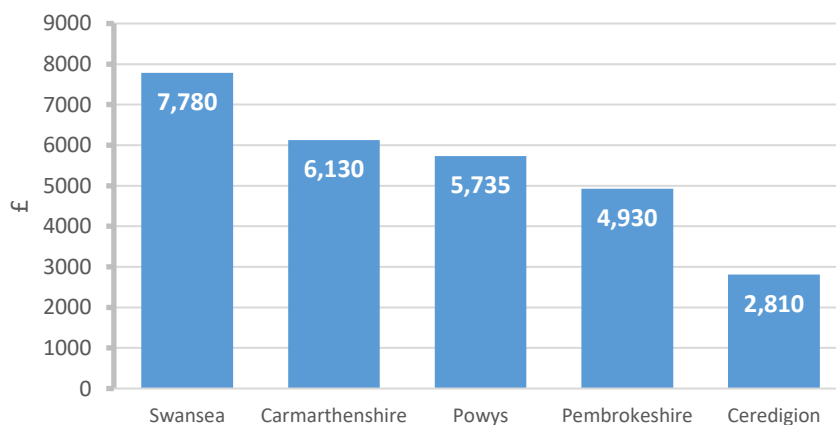
	Ceredigion (Numbers)	Ceredigion (%)	Wales (Numbers)	Wales (%)
Enterprises				
Micro (0 to 9)	3,675	92.0	92,235	89.1
Small (10 to 49)	295	7.4	9,550	9.2
Medium (50 to 249)	20	0.5	1,430	1.4
Large (250+)	5	0.1	315	0.3
Total	3,995	-	103,530	-
Local Units				
Micro (0 to 9)	4,020	88.4	105,095	83.1
Small (10 to 49)	470	10.3	17,665	14.0
Medium (50 to 249)	50	1.1	3,210	2.5
Large (250 +)	10	0.2	500	0.4
Total	4,550	-	126,470	-

(Source: Inter Departmental Business Register, ONS, 2019). Note: % is a proportion of total (enterprises or local units)

Count of Enterprises

In 2018 there were 2,810 *active* enterprises in the County, decreasing from 2,855 in the year before. As anticipated, this is lower than the County's nearest neighbours, as shown in Figure 10. The net 'birth rate' of new enterprises in Ceredigion in 2018 was -25, lower than the Mid and South West Wales average of 176. The net birth rate is the count of new enterprises in an area minus the number of deaths of enterprises, and is often used as a measure of innovation and support for new start-ups in an area.

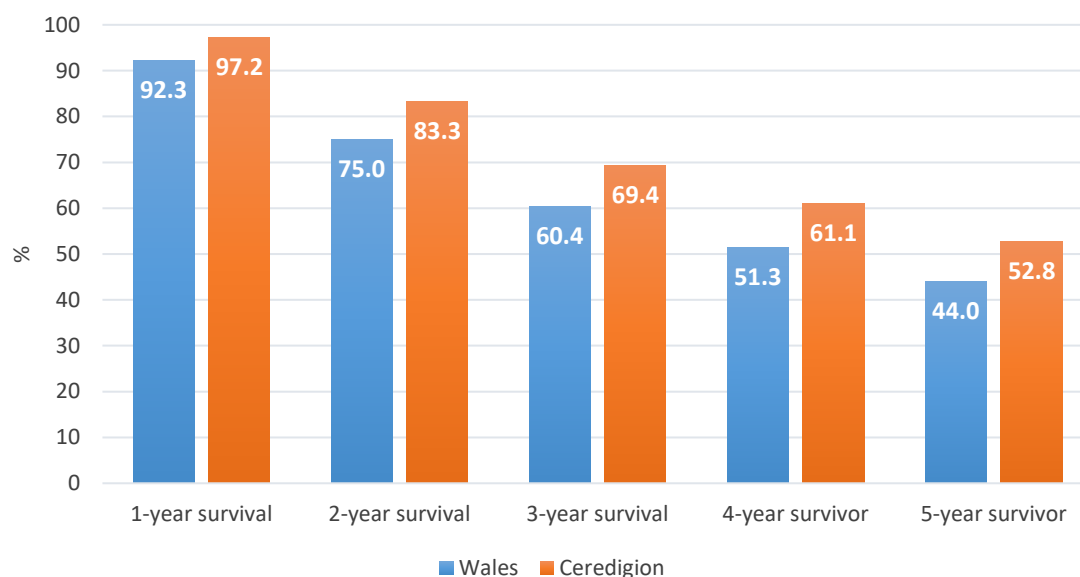
Figure 10: Count of Active Enterprises 2018



Business Survival Rates

However, survival rates of businesses in Ceredigion are very strong and this is one of the unique strengths of the local economy – the survival rates for all lengths, as shown in Figure 11, are above the national average and the highest nationally amongst all local authority areas. Whilst this could suggest some enterprises are more risk averse than other areas, it could equally provide a reflection of the level of support and stability for new businesses in the County.

Figure 11: Survival rates of new enterprises



The Growing Mid Wales Partnership

The characteristics of the local economy, such as over-dependence on micro and small enterprises, infrastructure and rurality are not unique to Ceredigion – neighbouring Powys experiences many of the same challenges in growing its local economy. For example, the proportion of micro and small enterprises in Powys is exactly the same as Ceredigion at 99%, average commuting times for employees are slightly higher than Ceredigion at 22.2km (compared to 21.3km for Ceredigion), and the population density of both areas are the lowest in Wales (Powys 26 people per sq.km. and Ceredigion 41 people per sq. km).

These unique characteristics and similarities between both areas have been the catalyst for the Growing Mid Wales Partnership, which covers the Ceredigion and Powys areas. The Partnership seeks to represent the region's interests and priorities for improvements to the Mid Wales economy, by building existing strengths of the local economy such as the opportunity for future expansion, developing infrastructure both physical and digital and stronger than average economic growth over the last twenty years.

The Partnership's Framework for economic growth across the region focuses on the five priorities areas outlined in Table 3, along with a series of interventions to achieve economic and business growth across the region.

Table 3: Growing Mid Wales Partnership 5 Priority Areas

Priority Area	Intervention
Diversifying the economic base	Interventions to encourage business growth and inward investment including better links with research and education
Supporting and strengthening existing businesses	through targeted business support measures, developing local supply chains and improved digital connectivity
Creating new quality job opportunities	Increasing the number of high value jobs, competitiveness and engagement with higher education
Developing workforce skills	improving skills levels and compatibility with the needs of businesses in Mid Wales
Improving communications, accessibility and infrastructure	Developing physical infrastructure, improving transport flow and connectivity, digital connectivity and building on environmental assets to support business growth

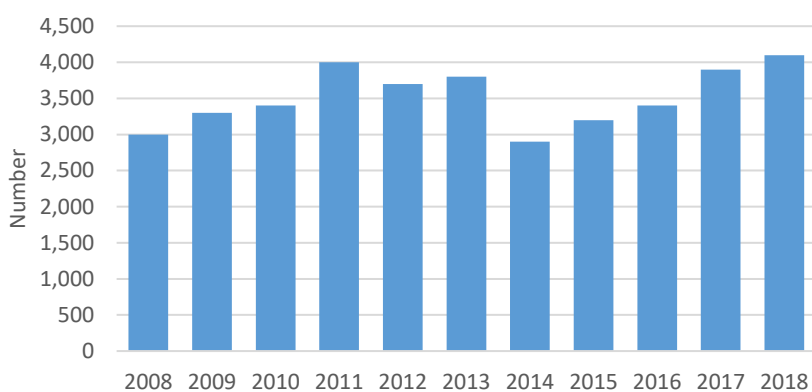
Working Practices

Working patterns have been changing for many years. An increase in women in the workforce, the introduction of flexible working regulations in the early 2000s and people living longer were just some of the changes witnessed during the latter part of the twentieth century and into the twenty-first.

Commuting

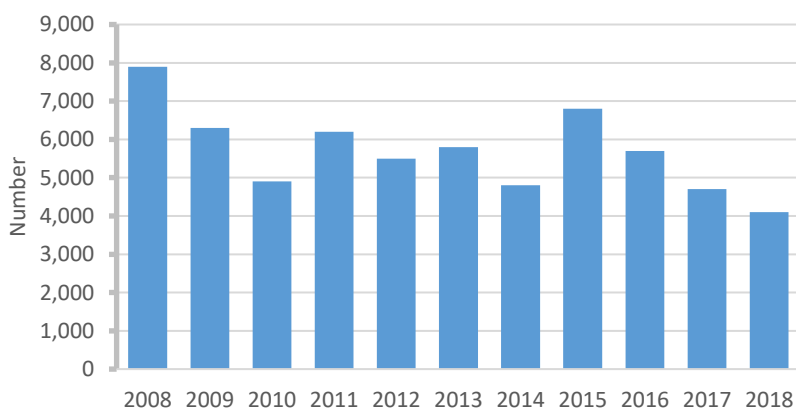
The number of people commuting *out* of the county has increased consistently for the last five years and increased by 28.1% since 2015 alone. In real terms, this equates to a difference of 900 and the number has reached its highest figure at any stage over the last decade, see chart below.

Figure 12: Number of people commuting out of the area



Conversely, the opposite trend has been seen in those commuting into the area, where the numbers have been decreasing in recent years. Between 2015 and 2018 there was a 39.7% decrease and a 12.8% decrease between 2017 and 2018 alone, see chart below. This is clearly part of a longer term trend that has implications for the economy, not least of which is the retention of the workforce and the skills therein.

Figure 13: Number of people commuting into the area

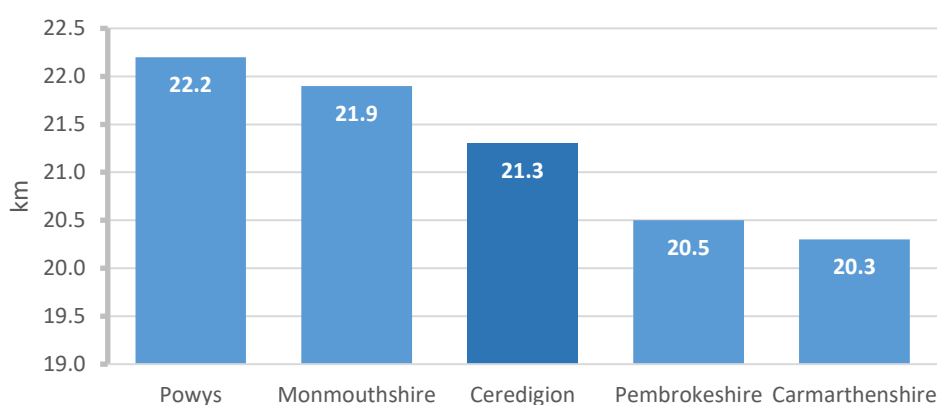


In the wider context, Carmarthenshire has witnessed a similar trend to Ceredigion where the number of commuters travelling out of county has increased and those travelling in has decreased. Meanwhile, Powys and Pembrokeshire have both seen the opposite trends in their

counties, with increased numbers travelling into the county and a decrease in those commuting out. It seems quite logical that there is a link between the opposing fortunes of these counties and one possible explanation as to where the increase in outward commuting from Ceredigion are heading. This is particularly supported by an increase in employee jobs in the Powys and Pembrokeshire areas between 2017 and 2018, while the number in Ceredigion remained static.

The distances travelled to work are based on Census 2011, but using this as a baseline we can see that commuters in Ceredigion travelled on average 21.3 km to work, which was the third highest commuting distance in Wales. This is most likely because of the large rural nature of the county combined with its very low population density. As anticipated, Powys had the longest commuting distances for the same reasons as Ceredigion, followed by Monmouthshire, probably because of its position close to the two Severn crossings and the draw of employment from locations in England.

Figure 14: Average distance travelled to work (km)



Earnings

Analysis of earnings provides some evidence to support the assumption that some of Ceredigion's workforce commute out of county for higher paid employment in neighbouring counties. We know from the latest Annual Survey of Hours and Earnings 2019 that average annual earnings are lower in Ceredigion than across Wales, and with the exception of Powys, also lower than the rest of Mid and South West Wales. For example, Table 3 shows that the average annual earnings for those who live in Ceredigion are £24,126, over £2,000 less than the £26,267 across Wales.

Table 4: Average Annual Earnings

Area	By place of work	By place of residence
Ceredigion	£21,687	£24,126
Carmarthenshire	£25,248	£26,568
Pembrokeshire	£24,302	£24,886
Powys	£23,075	£24,001
Swansea	£23,945	£25,029
Merthyr Tydfil	£24,072	£26,553
Wales	£25,714	£26,267
UK	£30,629	£30,629
Ceredigion as % of Earnings in Wales	84%	92%

Furthermore, there is also a very noticeable difference between earnings by place of *residence* and by place of *work*. By place of residence, i.e. those who live in Ceredigion but not necessarily work in the county the average annual earnings is £24,126, but when grouped by place of work, i.e. those who actually work in Ceredigion but not necessarily live in the county, the figure drops to just £21,687. This shows that, on average, earnings are higher for those who live in Ceredigion but work outside of the county, compared to those who live in Ceredigion and work in the county.

Figure 15: Average annual earnings by place of work and by place of residence

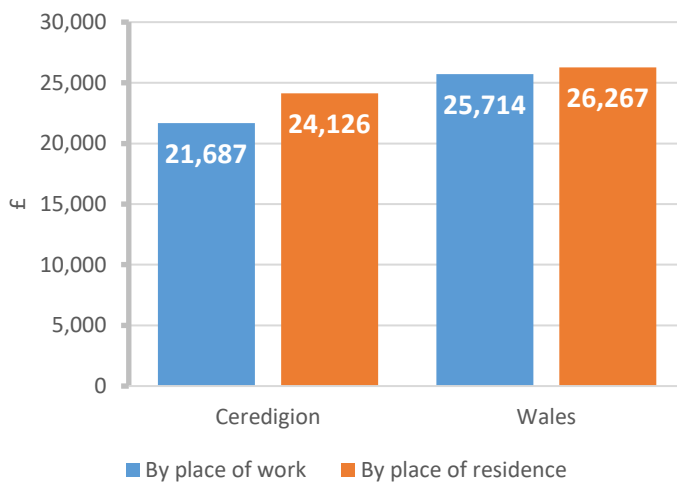


Figure 15 displays this difference compared to the national average. As a useful summary, earnings by place of work for Ceredigion is 84% of the Wales average, but this rises to 92% by place of residence. The reasons why some residents choose to leave an area normally involve a more complex range of circumstances than just earnings alone, and this is a subject that is explored in more detail under Health and Wellbeing. However, the issue of lower earnings in Ceredigion is a re-emerging theme in any analysis of the local economy and one of the more significant challenges it faces.

Earnings versus Income

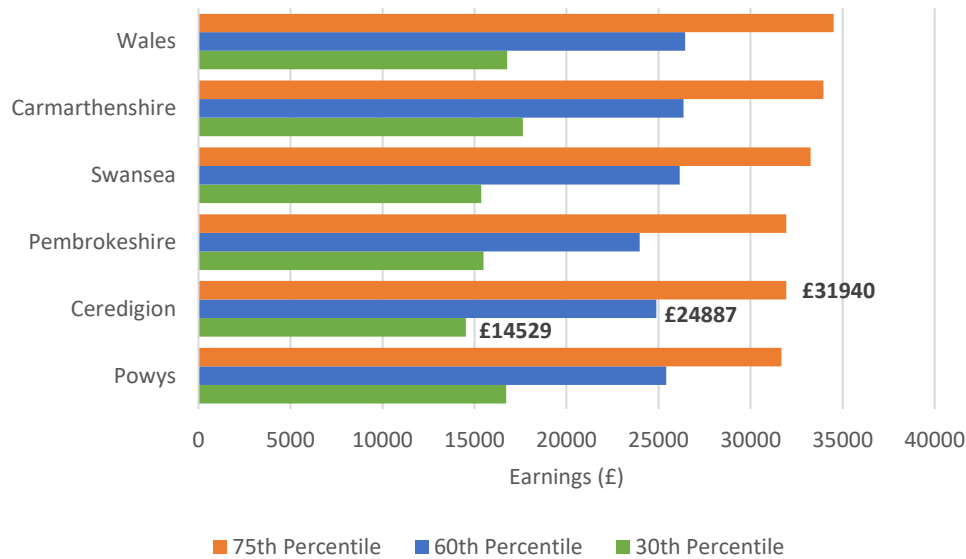
Earnings should not be confused with *household income*, which is another useful measure of prosperity. Household income includes all income for a household, including that from pensions and other investments, and not just salaries. This is explored in more detail under Personal Prosperity. Whilst household income presents a more positive impression of personal prosperity in Ceredigion than earnings alone, even then overall household income in Ceredigion (£27,754) remains below the national average (£27,962) and noticeably below that of the UK as a whole (£31,979)³.

The Impact of Higher Earners

The number of higher paid employees in any area can distort average earnings and present an unrealistic picture of earnings for the majority of employees. This is a question that often arises in relation to the local economy in Ceredigion, where there are higher numbers employed in the public sector – at June 2019 33% of employees in Ceredigion were employed in Education, human health and social work, or public administration and defense/compulsory social security.

We know from the Annual Survey of Hours and Earnings 2019 (ASHE), that the 75th percentile for annual gross pay in Ceredigion is £31,940 – simply put, this means that 75% of jobs in Ceredigion have an annual gross pay of £31,940 or below, whereas for Wales this figure is much higher at £34,508. With the exception of Powys, it is also lower than the other authorities in the Mid and South West Wales region (Figure 16).

Figure 16: Earnings by 75th, 60th and 30th percentile

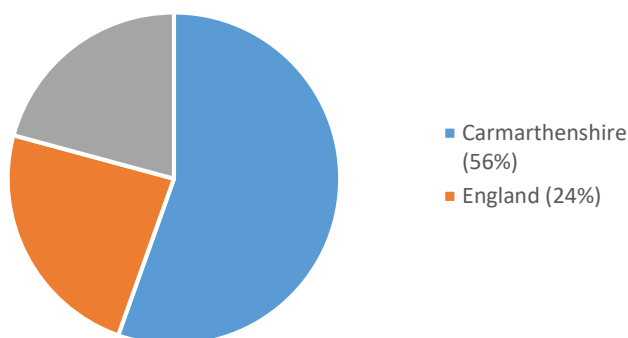


Furthermore, it also shows that 60% of jobs in Ceredigion have an annual gross pay of £24,887 or less, and 30% have an annual gross pay of £14,529 or less, both of which are below the national average. Analysing earnings in this way can help to provide a more realistic picture of earnings for the majority rather than relying on averages alone.

Commuters' Destination

Estimates from the ONS suggest that the majority, 56% or 1,900 of those commuting out of the county travel over the southern border to Carmarthenshire, but it is not possible to pinpoint their exact destination. A further 21% or about 700 are estimated to cross the south eastern border into Pembrokeshire and as much as 24% (800) commute as far as England. (Due to the data being disclosive or not sufficiently robust for publication, it is not known how many travel into Powys).

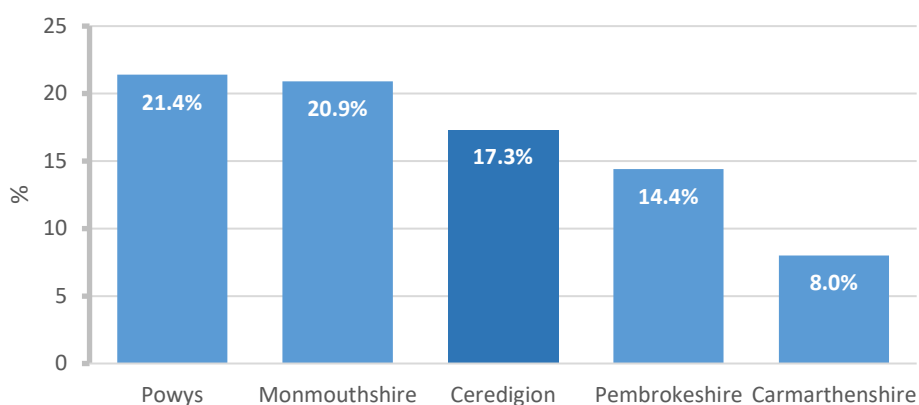
Figure 17: Destination of commuters out of Ceredigion 2018



Homeworking

Homeworking is a phenomenon that gained popularity in the latter part of the twentieth century, with the latest data suggesting that as many as 64,000 people were working from home in Wales at the end of 2018, double the figure ten years previously. Unfortunately this data is not available at county level, but we do know from the 2011 census that approximately 17.3% of Ceredigion's workforce work mainly from home, that would equate to about 6,200 people. Similarly to the distances travelled, both Powys and Monmouthshire had the highest rates of homeworkers, suggesting a very strong link between distances travelled and homeworking.

Figure 18: Percentage of homeworkers



Women in the Workforce

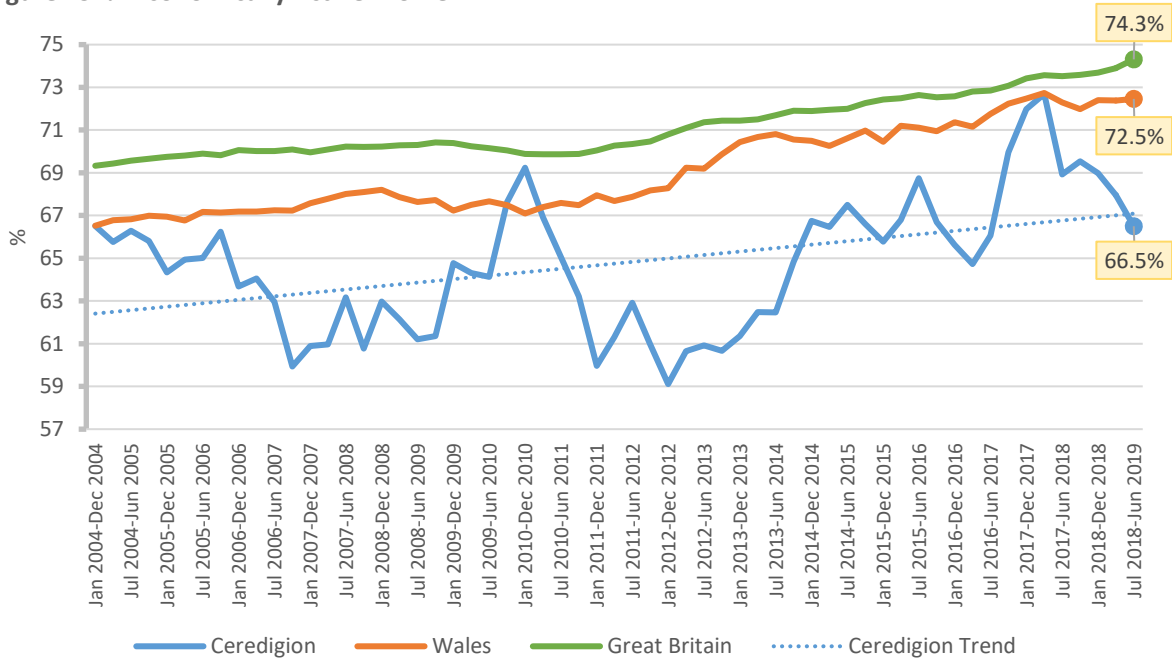
Women's representation in the labour force is steadily increasing – today in Wales, more than two-thirds (72.5%) of women aged 16-64 are economically active and 69.9% are employed, the latter being the highest percentage on record. In Ceredigion, the proportion who were economically active has increased significantly in recent years rising from just 59.1% in 2012 to a peak of 72.7% at the beginning of 2018. Since then there has been a decrease and the figure currently stands at 66.5% as at June 2019, see Table 5.

Table 5: Economically active females

	Ceredigion	Wales
Economically Active	66.5%	72.5%
In Employment	65.6%	69.9%

This is largely the result of changes in working patterns, where women have children less frequently and later in life, they are much less likely to leave the labour market around the time of their first child and are much more likely to stay in paid work in the years following. Across Wales as a whole, the increase in economically active and employed women has been more stable, see Figure 19 overleaf.

Figure 19: % Economically Active Women



Defining Economic Activity and Employment Rates

The terms “economically active” and “in employment” appear a lot in economic statistics but they are not always understood, which can lead to confusion when analysing data. **Economically active** is defined as people who are either in employment or unemployed. The *economic activity rate* is the percentage of the population who are economically active. In employment refers to those people who did some paid work in the period being analysed, whether as an employee or self-employed, those who had a job that they were temporarily away from, such as being on holiday, those on government supported training and employment programmes and those doing unpaid family work. The employment rate is the percentage of the population in employment who are of working age (16-64).⁴

Employment by Industry

An annual business survey known as the Business Register and Employment Survey (BRES) is undertaken by the ONS, which collects employment information. The most recent information available is that of 2018 (see Table 6).

The Ceredigion economy has a proportionally large share of jobs in the wholesale and retail trade, accommodation and food services, education, health and tourism sectors. Of the 30,900 people in employment within Ceredigion (2018), an estimated 74.4% (23,000) are employed in the service sectors (SICs F-R in the table below), 12.9% (4,000) in the tourism industry, 9.7% (3,000) are employed in the production and construction industries (SIC's B-E in the table below), and the remaining 4.5% (1,400), are employed in the Agriculture, Forestry and Fishing industry.

Table 6: Number and percentage of employee jobs by industry group in Ceredigion, 2018. (Source: ONS, 2019).

Employment by Broad Industry Group	Ceredigion (Number)	Ceredigion (%)
Agriculture, Forestry & Fishing (industry section A)	1,400	4.5%
Construction (B)	1,400	4.5%
Manufacturing (C)	1,300	4.2%
Electricity, gas and air conditioning supply (D)	100	0.3%
Water supply; sewage, waste management and remediation activities (E)	200	0.6%
Wholesale and retail trade (F)	4,000	12.9%
Transportation and storage (G)	600	1.9%
Accommodation and food service activities (H)	3,500	11.3%
Information and communication (I)	200	0.6%
Financial and insurance activities (J)	200	0.6%
Real estate activities (K)	500	1.6%
Professional, scientific and technical activities (L)	1,600	5.2%
Administrative and support service activities (M)	700	2.3%
Public administration and defence; compulsory social security (N)	2,100	6.8%
Education (O)	4,300	13.9%
Human health and social work activities (P)	3,800	12.3%
Arts and entertainment and recreation (Q)	700	2.3%
Other service activities (R)	600	1.9%
Tourism activities (S)	4,000	12.9%

This employment structure is fairly typical of a rural economy, largely following, national trends. Defra (2018) has identified the education and health sectors as being the largest in terms of gross value added (GVA) in predominantly rural areas, in addition to a high proportion of enterprises related to tourism.

The wholesale and retail trade sector typically employs the greatest proportion in both urban and rural areas. The proportion of workers in the agricultural sector in Ceredigion is lower than a

typical rural economy. However, a decline in the agricultural workforce is being seen nationally and the former director of the Centre for Rural Economy, has described how this decline has taken place concurrently with a growth in knowledge-based industries⁵. The construction industry usually accounts for 11% of the local units of registered businesses in rural areas (DEFRA, 2018). This figure is considerably lower for Ceredigion (at 4.5%). Anecdotally, the county has a shortage of construction workers, however, this phenomenon is not isolated to Ceredigion. Nationally, there is a substantial shortage in construction industry skills; the Federation of Master Builders (FBM) latest survey identified that skills shortages remain significant, with 64% of construction employers struggling to hire bricklayers in 2019 (FBM, 2019).

Employment by Occupation

Analysis of employment by occupation using the latest resident-based estimates (12 month period ending June 2019) from the Annual Population Survey (see Table 7) displays some variance in Ceredigion's labour markets compared to that of a typical rural area. Studies by Defra 2013 and Commission for Rural Communities 2010, found that rural area labour markets tend to have a limited labour pool on which to draw, employers are less likely to recruit graduates, and knowledge-intensive occupations are usually under-represented.

However, this trend is not as clear cut within Ceredigion, which has a proportionally large share of professional occupations (17%) and slightly higher proportion of occupations as managers, directors and senior officials than the national average. These occupational groups are considered as those that require the highest level of skills. These statistics illustrate the diversity of rural areas.

Table 7: Employment by population displaying the number and percentage in Ceredigion from the year ending June 2019 (Source: Annual Population Survey, ONS, 2019).

	Ceredigion (Number)	Ceredigion (%)	Wales (%)
Managers, directors and senior officials	3,400	10.0	9.7
Professional occupations	5,800	17.0	18.8
Associate professional and technical occ's	4,000	11.7	13.8
Administrative and secretarial occupations	3,200	9.4	9.4
Skilled trades occupations	6,400	18.8	11.7
Caring, leisure and other services occ's	3,200	9.4	10.4
Sales and customer service occupations	2,500	7.3	8.0
Process, plant and machine operatives	1,200	3.5	7.1
Elementary occupations	4,400	12.9	10.8

Qualifications

Qualifications in the Workforce

Linked to personal prosperity are the level of qualifications in the workforce, an area where Ceredigion has long been held in high regard for its strong attainment levels. The latest data from the ONS shows that the proportion of the working age population achieving NVQ Level 2 is noticeably above the national figures for both Wales and Great Britain as a whole at 78.7%.

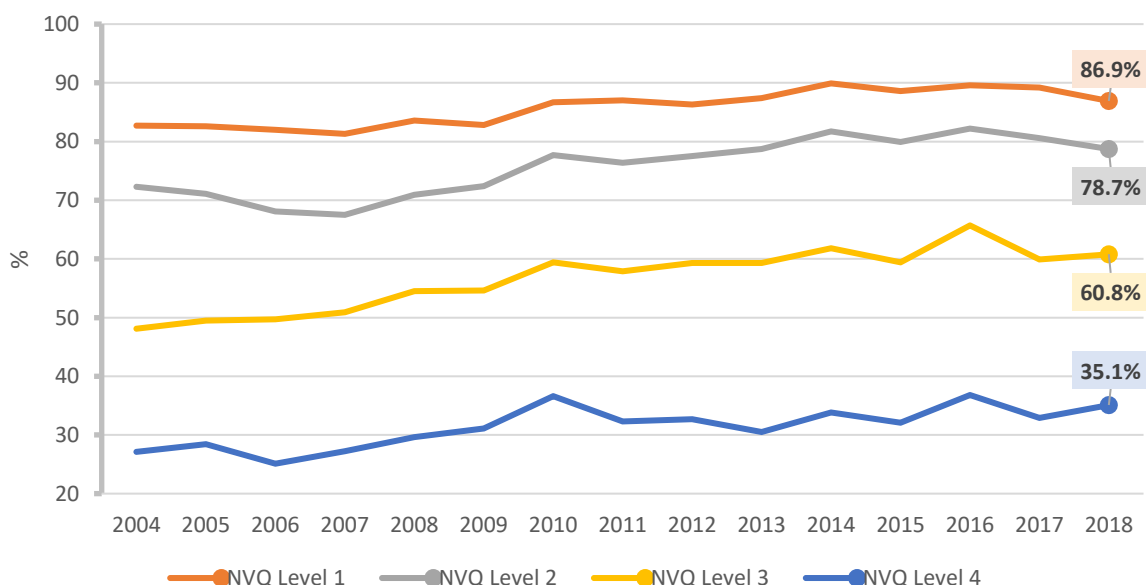
Table 8: Qualifications in Ceredigion's workforce 2018

	Ceredigion	Wales	Great Britain
	(%)	(%)	(%)
NVQ4 and above	35.1	35.4	39.3
NVQ3 and above	60.8	55.1	57.8
NVQ2 and above	78.7	74.0	74.9
NVQ1 and above	86.9	84.9	85.4
Other qualifications	6.8	6.5	6.8
No qualifications	6.3	8.6	7.8

NVQ Level 2 is defined as 5 GCSEs grades A to C and often regarded as a milestone in educational attainment. This category includes equivalent qualifications such as BTEC and Higher Diplomas. The same trend is visible at the higher NVQ level 3 qualifications, where Ceredigion's 60.8% is again noticeably higher than the national average of just 55.1%. NVQ Level 3 is A-Level and equivalent, such as Advanced Diplomas and BTEC National qualifications.

Overall, educational attainment remains one of the County's unique strengths from an economic and personal prosperity perspective. There has been a strong period of improvement in attainment levels across the County since 2008, although this trend is largely replicated across the nation as a whole. However, in the last two years, the improvements at the lower NVQ levels 1-2 in Ceredigion have plateaued and decreased slightly, while growth at the higher NVQ levels 3 and 4 continues.

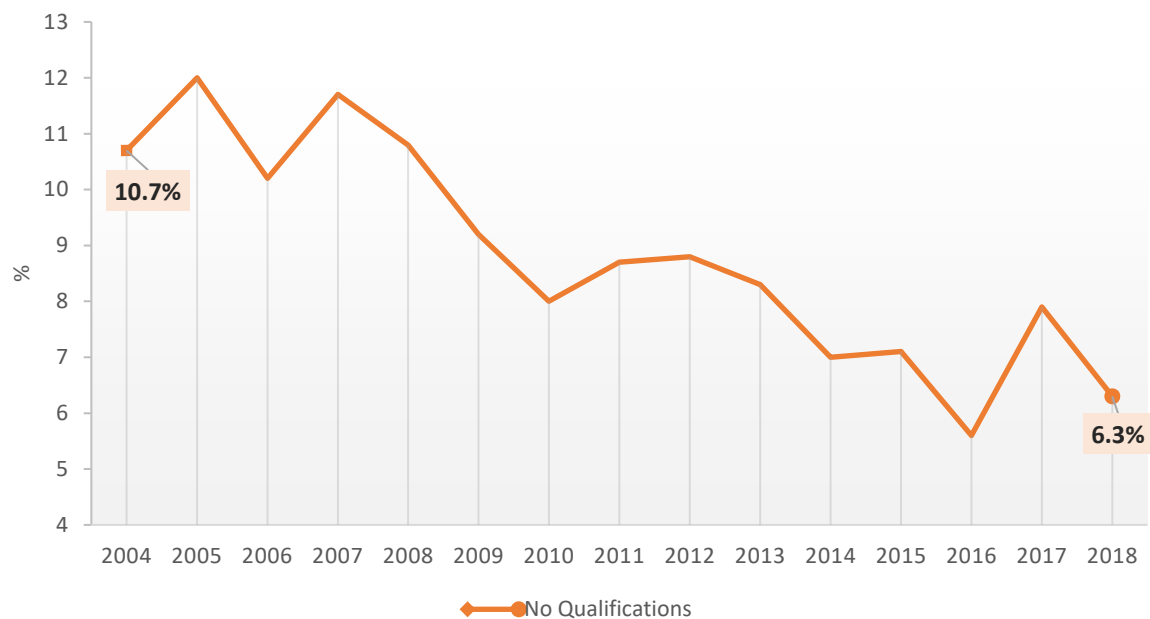
Figure 20: Qualifications in the Ceredigion workforce: NVQ Levels 1-4



No Formal Qualifications

When factored against the proportion of Ceredigion's population with no formal qualifications, the strong attainment levels become more pronounced – just 6.3% have no qualifications, compared to 8.6% nationally. Despite an increase between 2016 and 2017, the overall trend has shown a dramatic decrease from a peak of 12% in 2005 to 6.3% in the latest figures for 2018.

Figure 21: Proportion of Ceredigion's population with no formal qualifications 2004 to 2018



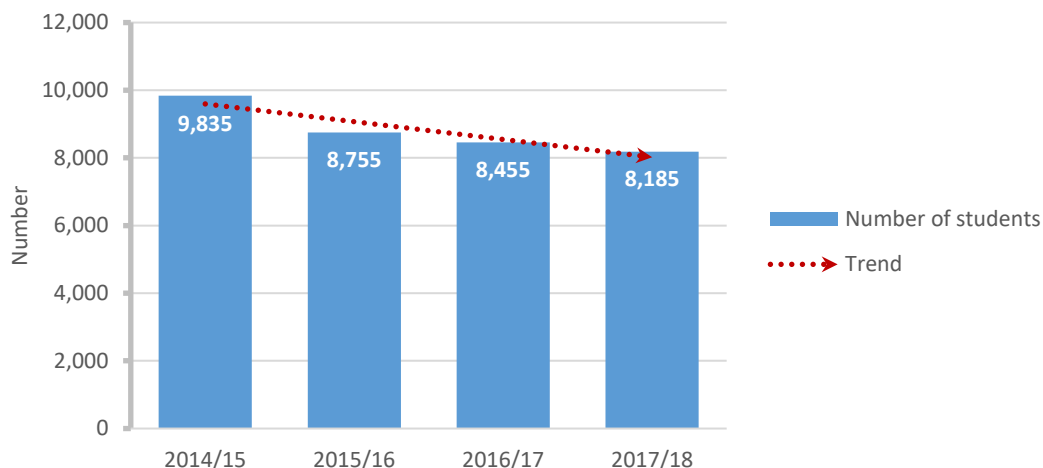
The highest level qualifications, NVQ level 4, is the only category where Ceredigion is below average – 35.1% in Ceredigion compared to 35.4% for the country as a whole. NVQ Level 4 is defined as degree level and equivalent, such as HND and BTEC Professional qualifications. This has led to speculation that some residents choose to leave the area in order to develop their career elsewhere. Cardiff, Monmouthshire and Vale of Glamorgan for example, have a much higher than average population with NVQ Levels 3 and 4, and correspondingly higher household incomes.

However, the decision to leave an area is unlikely to rest solely on household income alone, it is somewhat more complex and more likely to be a combination of factors including the availability of employment, the type of employment available and the more subjective aspects of the environment and social activities on offer, hence the qualitative work being undertaken in preparation for the new Economic Strategy which aims to understand these ongoing questions.

Student Numbers

Students play a large role in the County, both from an educational and economic perspective. Aberystwyth University, for example, has over 8,000 students who account for 11.2% of the County's population. But despite being named Welsh University of the Year 2020 and consistently achieving the highest student satisfaction levels across Wales and England, student numbers are in decline (see Figure 22).

Figure 22: Number of Aberystwyth University Students



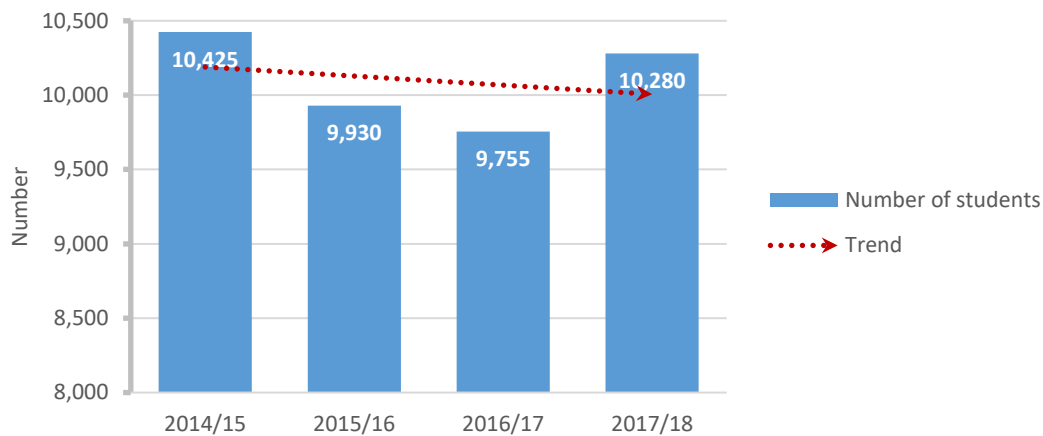
This is not a new phenomenon however – concerns around the impact of tuition fees have received considerable media coverage for over ten years. During the four year period between 2014/15 and 2017/18, the number of students at Aberystwyth decreased by 1,650 which equates to a 16.8% reduction. The same trend is visible across Wales but to a lesser extent – the number of students decreased by 2.5% or 3,400 over the same period. This masks the fact that some Universities in Wales actually saw an increase in numbers – Swansea in particular has seen a significant increase of 27.4%, largely as a result of the new Bay Area Campus. A breakdown by institution can be seen in Table 9.

Table 9: Number and percentage change in Higher Education students in Wales by institution

Institution	2014/15 to 2017/18		2016/17 to 2017/18	
	# difference	% difference	# difference	% difference
Aberystwyth University	-1650	-16.8%	-270	-3.2%
Bangor University	390	3.6%	-115	-1.0%
Cardiff University	1455	4.8%	340	1.1%
Cardiff Metropolitan University	-3235	-23.7%	-560	-5.1%
Glyndwr University	-1020	-15.1%	-670	-10.4%
The Open University	-380	-5.2%	25	0.4%
Swansea University	4395	27.4%	1,255	6.6%
University of Wales Trinity Saint David	-145	-1.4%	525	5.4%
University of South Wales	-4850	-17.5%	605	-2.6%

The trend is slightly different at the University of Wales Trinity Saint David, whose Humanities courses are taught at the Lampeter Campus. Whilst there was a small decrease of 1.4% in the number of students between 2014/15 and 2017/18, the short term trend between 2016/17 and 2017/18 shows an increase of 5.4% (Figure 23). A small proportion of these (3.5% or 360)⁶ are located on the Lampeter Campus.

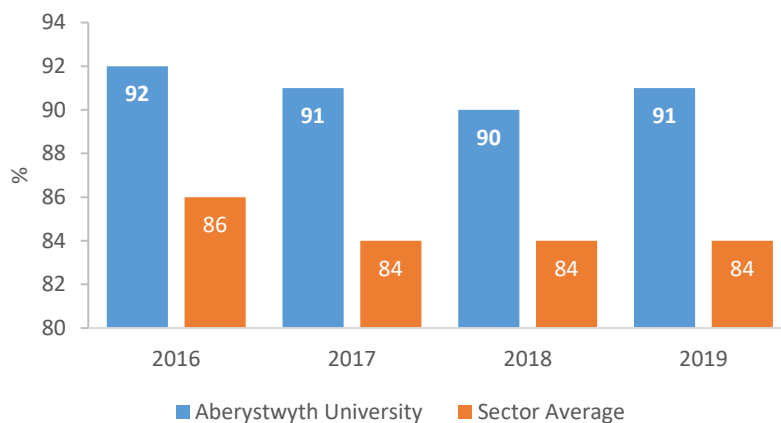
Figure 23: Number of University of Wales Trinity Saint David University Students



Student Satisfaction

Aberystwyth University remains a very attractive proposition for potential students from both a social and educational perspective – for the last four consecutive years it has been ranked number 1 nationally across Wales and England in the National Student Survey, and was awarded “Gold” in the 2018 Teaching Excellence and Student Outcomes Framework. Given the attractiveness of Aberystwyth University, the reasons for the decrease in student numbers are more likely to be non-academic related, such as increases in tuition fees or the cost of living.

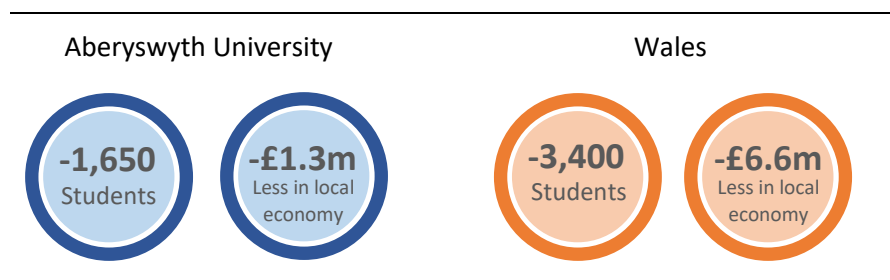
Figure 24: Aberystwyth University's overall student satisfaction rate



Student Spending

Monetizing the impact of the decline helps to demonstrate the wider impact on the local economy. Research in 2019 conducted by “Save the Student” found that on average university students spend £807 per month⁷, including rent. Using this as a baseline, the reduction in Aberystwyth University students over the last four years would equate to £1.3m less per month circulating in the local economy and £218k in the last year alone. Of course the cost of living in rural West Wales is very different from the large conurbations in the south of the country, but even then, the monetary impact of 1,650 less students would still exceed £1m per month⁸.

Figure 25: Decline in University students 2014/15 to 2017/18



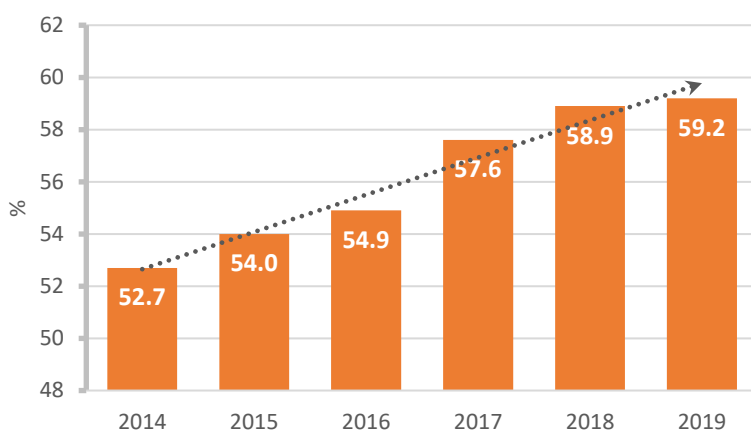
In the wider context, the reduction in student numbers across Wales equates to 3,400 less students, and £6.6m circulating less per month between 2014/15 and 2017/18. The situation is slightly different across the UK as a whole, where student numbers have increased by 1.1% over the same period.

Welsh Language

Knowledge of the Welsh language is one characteristic that is often considered from a geographical point of view. The County Council's *Corporate Strategy* sets the mandate for the county to remain a "vibrant home for the Welsh language and culture". From the Census back in 2011 we know that 47.3% of the population of Ceredigion say they can speak Welsh, and it is this figure that is often quoted in the media and in official publications.

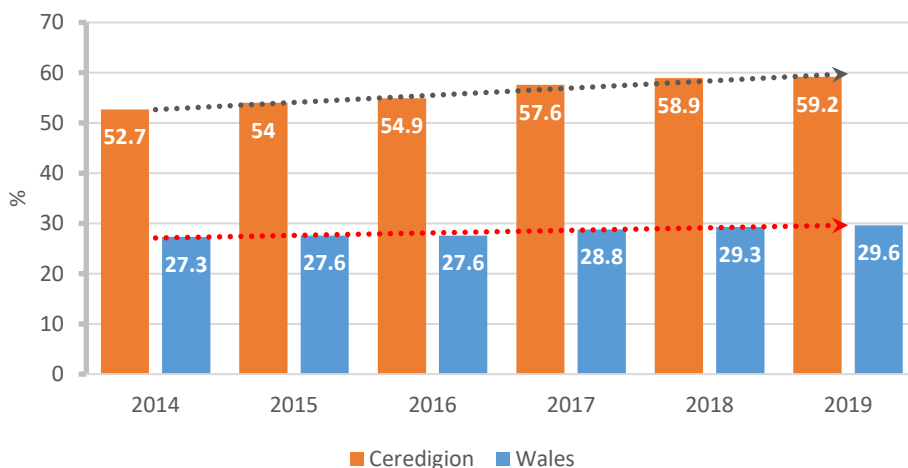
However, these figures are supplemented through the Annual Population Survey, and the latest results provide strong evidence to suggest that the County remains a bastion of the Welsh language. Over the last six years, the proportion of people saying they can speak Welsh has increased consistently each year, rising from 52.7% in 2014 to almost 60% by 2019, see Figure 26.

Figure 26: Percentage of people in Ceredigion who say they can speak Welsh (June 2019)



Given the relative complexity and commitment required in learning a new language, this 7%pt increase is significant, particularly when compared to the national picture where the figure is increasing but at a slower rate – over the same period the proportion who said they could speak Welsh across the nation as a whole had reached just under 30% by 2019, see Figure 27.

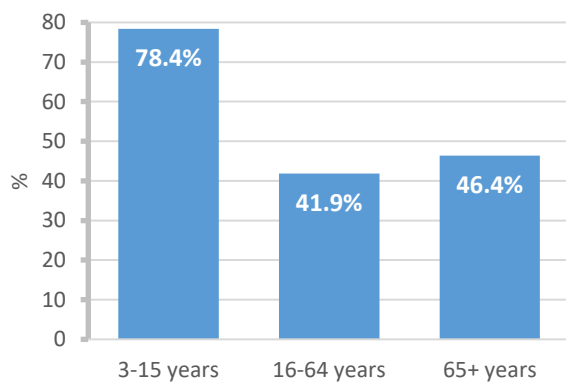
Figure 27: Percentage of people in Ceredigion who say they can speak Welsh compared to Wales (June 2019)



These figures are supported by the Council’s own data, where Welsh language is included as part of the standard demographic questions in its consultation exercises with the public. For example, the 2019 Budget Challenge exercise revealed that 63% of respondents had some skills in Welsh, a similarly noticeable increase on the 56% reported in the previous exercise in 2015.

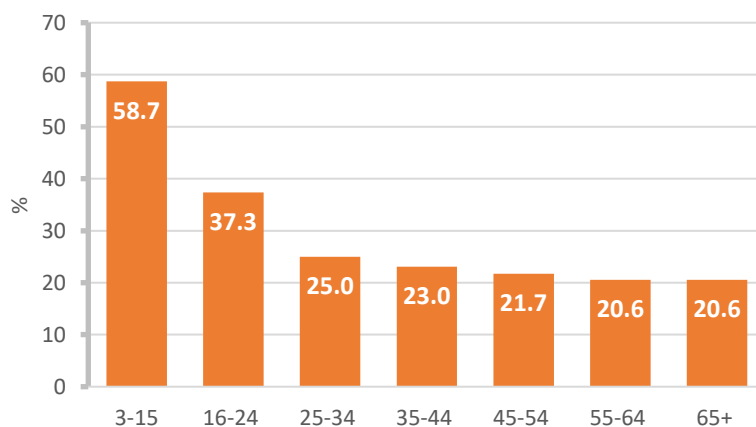
We also know from the last Census that in Ceredigion the younger age groups have the largest proportion of Welsh speakers – over three quarters (78.4%) of 3-15 year olds.

Figure 28: The percentage of Ceredigion's population who say they can speak Welsh by age group (Census 2011)



This is supported by data on the national picture, which shows that nationwide, 3-15 year olds are more than twice as likely to speak Welsh than those of working age (16-64), although as before, the figures are lower for the nation as a whole than in Ceredigion alone. The actual number of Welsh speakers is estimated to be 874,000 across Wales.

Figure 29: Percentage of Wales' population who say they can speak Welsh by age group (June 2019)



Whilst the evidence suggests that the support available for new speakers is good, if the future Economic Strategy leads to inward migration as a result of job creation, business relocation and start-ups, then it is possible there would be an increase in non-Welsh speakers and possibly create demand for additional support.

Transportation in Rural Wales

Transport plays a central role in many aspects of daily life. It provides access to employment opportunities, leisure and social activities, in addition to providing access to vital services such as education and health. Moreover, transport connects businesses with their customers and suppliers, which is critical for economic prosperity. Poor quality, or lack of rural transport has been identified as a contributory cause of rural poverty in Wales or 'poverty of access' (Powell et al. 2018).

Roads

Ceredigion has three main "A" roads that connect the county to Powys, Carmarthenshire and Pembrokeshire (see Figure 30).



Figure 30: Map of key road, rail, airport and port infrastructure in Wales. (Source: Welsh Government, 2008)

The A44 coming in from the east (Llangurig, Powys to Aberystwyth, Ceredigion) is the main road over the Cambrian Mountains into Ceredigion, connecting the county to Powys and to further routes across the border into Shropshire, England. The A487 stretches along Ceredigion's coast, connecting the north and south of the county. The A485 which leads off from the M4 in Carmarthenshire, and connects Carmarthen to Lampeter and the Teifi Valley.

The county does not have a motorway, the closest is the M4 in Carmarthenshire, which is approximately 64.2 km from the centre of Ceredigion, and takes around an hour and a quarter by car. The proportion of A roads in Ceredigion only makes up a small percentage of the county's

roads (12%). The most dominant types of road are the B and C roads which make up 51.5% of Ceredigion's road types.

Table 10: Road length (km and percentage), by type of road in Ceredigion, 2018-2019. (Source: Road Lengths Data Collection, Welsh Government, 2019)

	Ceredigion (km)	Ceredigion (%)
Motorway	0	0
A Road (County)	158.3	7.0
A Road (Trunk)	114.1	5.0
B Road	325	14.3
C Road	841.6	37.2
B and C Roads	1166.6	51.5
Minor Surfaced Roads	826.1	36.5
Total	2265.1	100

Airports

Wales has relatively few domestic airports and only one international airport; Cardiff International. From the centre of Ceredigion, Cardiff International is approximately 160km away and takes over two hours by car, over five hours by rail from Aberystwyth, and over seven hours by bus. Cardiff Airport tends to have a smaller range of travel destinations and at a higher cost than elsewhere. This means that transportation links to major airports in England (Manchester, Liverpool and Birmingham) are important for Ceredigion's connectivity.

West Wales Airport is located at Aberporth in Ceredigion, about 1.5 miles from the West Wales Coast. It is open to General Aviation visitors who can use it for business, and it is also used by the military. The airports unmanned aircraft centre is the only facility of its type in Europe.

Ports

Wales has several ports that connect the Republic of Ireland, the UK and Mainland Europe. Ports are located in Milford Haven, Newport, Port Talbot, Fishguard, Holyhead, Mostyn, Neath, Cardiff, Barry and Swansea. The closest port to Ceredigion is Fishguard (Pembrokeshire), approximately 97km from the centre of Ceredigion.

Railway

Ceredigion's main railway station is in Aberystwyth which runs trains through Borth and then onto Machynlleth (Powys). It is served by passenger trains operated by Transport for Wales and is the terminus of the Cambrian Line. Trains run from Aberystwyth to the Midlands and London via Machynlleth and Shrewsbury. Thus, the Aberystwyth railway is a vitally important service in connecting northern Ceredigion to its neighbours and across the border to England.

Transportation by Bus and Car

Ceredigion's network of bus services links all major towns and most villages. Buses and coaches are provided mainly by private sector companies. TrawsCymru bus links provide long distance

travel to South Wales (from Cardiff, Swansea and Haverfordwest) and to North Wales (Bangor and Wrexham). The Megabus service travels further afield, linking Aberystwyth, and Lampeter to Swansea, Cardiff and London. However, due to the dispersed nature of settlements and austerity measures imposing deep cuts on public transport in rural areas (Powell et al. 2018), Ceredigion's public transportation tends to be restricted in scope and time of operation. Due to the sparsity of settlements, travelling via car around Ceredigion is considerably more convenient than using public transportation, as in some cases the return journey takes six times longer on a public bus. Thus, it is no surprise that the dominant form of travel across Ceredigion is the private car, as for some groups (those living in the most rural areas), the car is often the only realistic mode of travel.

The Digital Economy

The growing role of digital commerce is very visible in society – the value of e-commerce sales in the UK non-financial sector reached £688bn in 2018⁹, and increased by 18% over the previous year, the highest annual increase since comparable records began in 2014. This growth has largely been driven by an increase in website sales of £138bn since 2014¹⁰, and this trend is likely to continue. There is of course a corresponding impact on the high street where many ‘bricks and mortar’ retailers have closed or diversified, and which is changing the landscape of our high streets.

But the digital economy is about more than just retailing - the provision of services is also changing and so too the channels used in delivering those services to the customer, with banking and insurance probably the best of example of this. The same level of growth is visible in Wales where the turnover of Welsh digital technology companies exceeded £1bn for the first time in 2019, with over 3,600 digital technology companies employing 45,000 workers¹¹, see Figure 31. As far back as 2016, the BBC were reporting that Wales had the fastest growing digital economy outside of London, based on the number of new digital enterprises¹².

Figure 31: Value of the Digital Economy in Wales 2019



However, the growth in the so-called “digital economy” is only made possible by the infrastructure to support it. Research carried out on behalf of Ofcom, the communications regulator, confirmed the positive relationship between broadband investment and economic growth – their study over a fifteen year period up to 2016 showed how broadband adoption led to a 0.37% increase in GDP per annum or 5.5% over the period of the study¹³.

What is digital infrastructure?

The most obvious face of digital infrastructure is the availability of mobile and fixed phone and broadband, but it also includes location based technologies such as GIS, network infrastructure and data centres. Table 11 defines the different types of broadband available, while Table 12 overleaf defines the different types of mobile services.

Table 11: Definitions of Broadband speed

Type of Broadband	Definition
Standard	Standard Broadband speed refer to the highest predicted speed of any major ISPs for packages up to 30 Mbit/s.
Superfast	Superfast Broadband speed predictions refer to the highest predicted speed of any major ISPs for packages between 30 and 300 Mbit/s.
Ultrafast	Ultrafast Broadband speed predictions refer to the highest predicted speed of any major ISPs for packages over 300 Mbit/s

Table 12: Definitions of mobile services

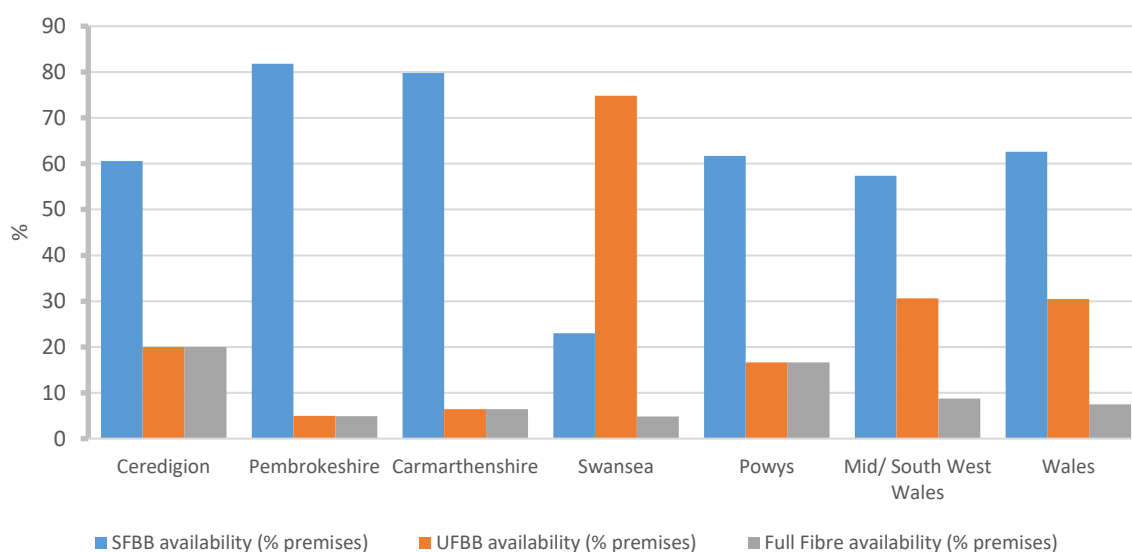
Type of mobile service	Definition
2G	2G networks support voice calls, text messaging and very low speed data connections. All handsets are able to connect to 2G networks.
3G	3G networks support voice calls, text messages and mobile broadband. Most phones support 3G connections, but some older phones and very basic phones do not. When 3G coverage is not available handsets will try and connect to the 2G network, where one is available to them.
4G	4G services make it much quicker to surf the web on your mobile, tablets and laptops. Because of this, 4G is ideally suited for services which demand more capacity like video streaming, mapping and social networking sites. For the typical user, download speeds of initial 4G networks could be around 5-7 times those for existing 3G networks.

In rural and often remote areas, like much of Ceredigion and parts of Mid / South West Wales, improving broadband services and location-based technology is critical to the delivery of services. Despite perceptions of connectivity in Ceredigion, the availability and speed of digital infrastructure has improved greatly in Ceredigion in recent years. There of course remains challenges in developing those services further as outlined in the 2018 and 2019 *Connected Nations Wales*¹⁴ reports that highlights Ceredigion that highlights the specific issues in the provision of services to very rural and sparsely populated areas.

Fixed Broadband

The latest data from Ofcom challenges some of the preconceptions about digital connectivity in Ceredigion - whilst there are challenges in improving the availability of broadband in any rural and sparsely populated area, current coverage is by no means poor. For example, Figure 32 displays the availability of different types of broadband in Mid and South West Wales compared to the national benchmark¹⁵.

Figure 32: Availability of Broadband by type

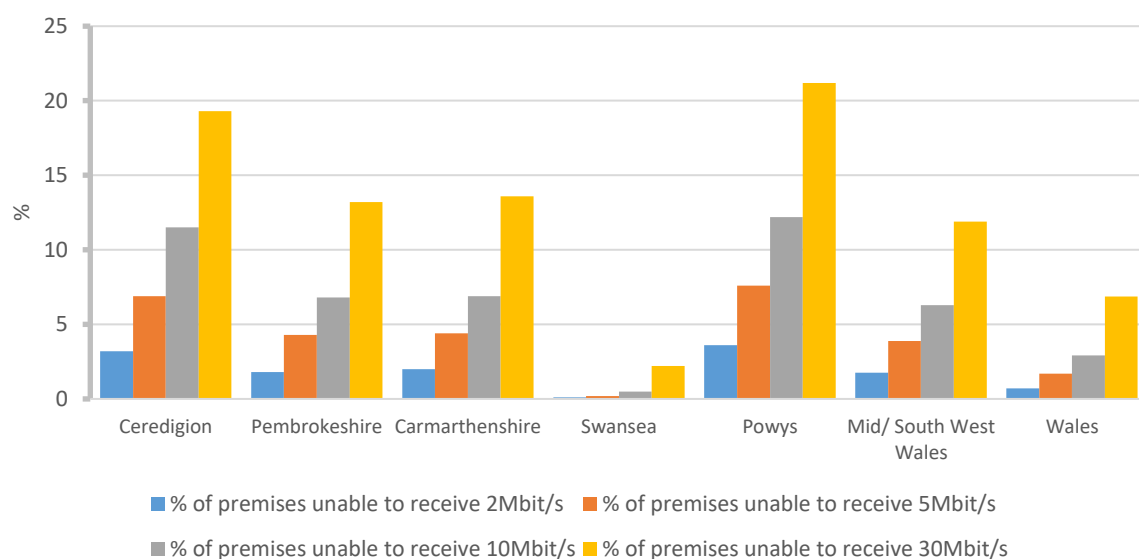


It shows that availability of *Superfast Broadband* to Ceredigion premises is 60.6%, above the average for South and West Wales (57.4%) and only slightly below average for Wales as a whole

(62.6%). The availability of *Ultrafast Broadband* in Ceredigion (20%) is lower than the national average (30.5%) but noticeably above the nearest neighbours of Pembrokeshire, Carmarthenshire and Powys. Perhaps surprisingly, the availability of *Full Fibre Broadband*, the fastest and most reliable broadband technology, is 20% in Ceredigion which is higher than the Mid/South West Wales region (8.8%), the Wales average (7.5%) and the average for the UK as a whole (7.1%).

Despite this, the overall proportion of premises in Ceredigion that are unable to receive 2, 5, 10 and 30Mbit/s broadband speeds remains higher than the rest of Mid and South West Wales, with the exception of neighbouring Powys (see Figure 33). Just under 20% are estimated to be unable to receive speeds of 30Mbit/s in Ceredigion, compared to 11.8% in the Mid/South West Wales region.

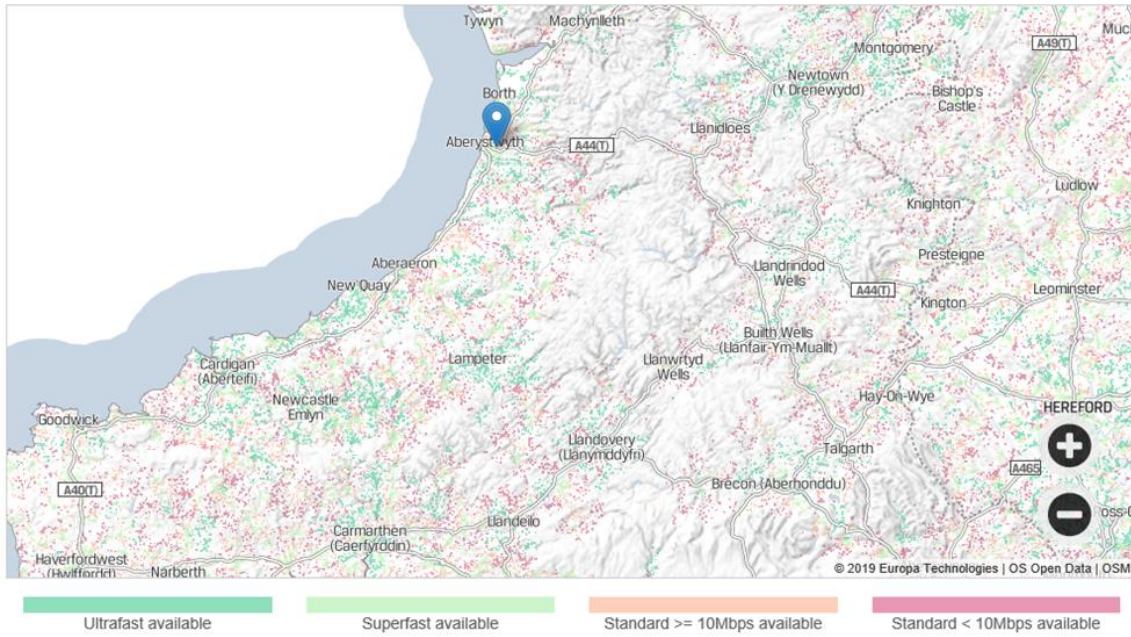
Figure 33: Premises unable to receive different types of Broadband



However, this is an anticipated trend that was highlighted in the 2019 Connected Nations Wales Report¹⁶, which lists Ceredigion as having the second highest proportion of premises in Wales unable to access services of 10Mbit/s or more at 12%, which equates to about 4,500 premises. These figures are produced by National Assembly for Wales Constituencies so comparison between local authority areas is not possible, but it is unsurprising that Brecon and Radnorshire had the highest result of 14%.

The evidence available from Ofcom suggests that the real challenge for Ceredigion lies not in connecting Ceredigion, but in *increasing* existing connectivity through greater access to the faster broadband services. The Ceredigion Assessment of Local Wellbeing supports this by emphasizing the need to “develop and maintain universal access to the latest digital channels for citizens and customers”¹⁷. Figure 34 shows the currently availability of Broadband across Ceredigion. The clustering of Ultra and Superfast broadband around the main towns in the county can clearly be seen.

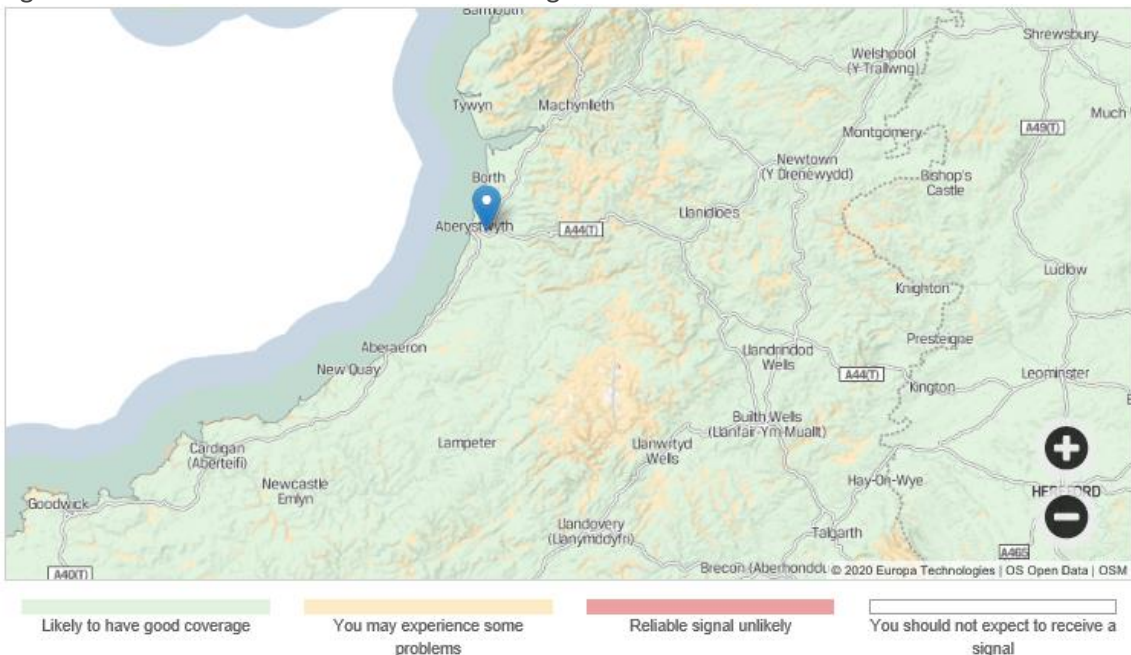
Figure 34: Availability of Broadband across Ceredigion



Mobile Coverage

A similar trend can be seen in mobile coverage, where data from Ofcom again shows a more positive picture of coverage in the county than might at first be expected. For example, Figure 35 displays the coverage map for outdoor 4G services for the main operator in the area, EE, which shows that the majority of the county is “likely to have good coverage”. There are some pockets to the north and on the eastern border where usage “may experience some problems”. Similar to broadband technology, investment in mobile communications has also been developing in the county - new Base Transceiver Stations were installed by EE in 2018 to improve coverage in some of the known “not spots” including Capel Dewi in the north and Pontsian in the south.

Figure 35: EE 4G Outside Voice Mobile Coverage



However, in comparison to other counties in the Mid and West Wales region, the availability of 3G and 4G services in Ceredigion remains low, see Figures 36 and 37. 3G coverage of all operators reaches 80.2% of premises in Ceredigion, the lowest in the region, whilst the same is true of 4G coverage where 81.5% are covered. Across Wales as a whole, 94% of premises are covered by 3G services and 92% are covered by 4G.

Figure 36: Percentage of premises covered by 3G Mobile Services (based on outdoor signal from all operators)

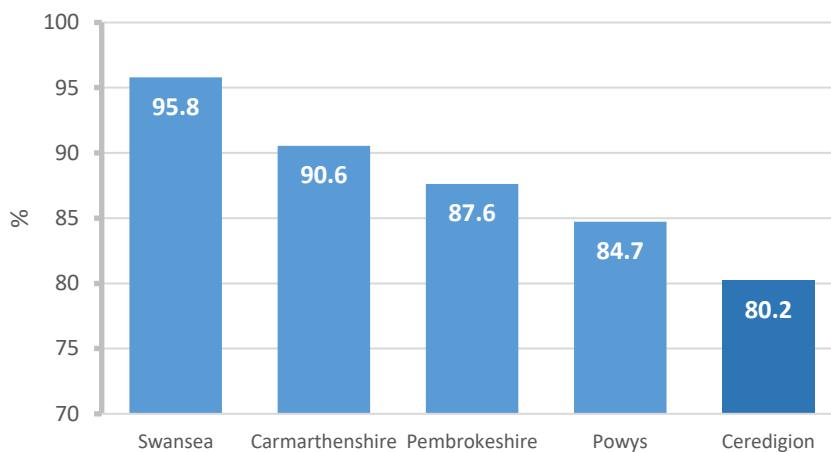
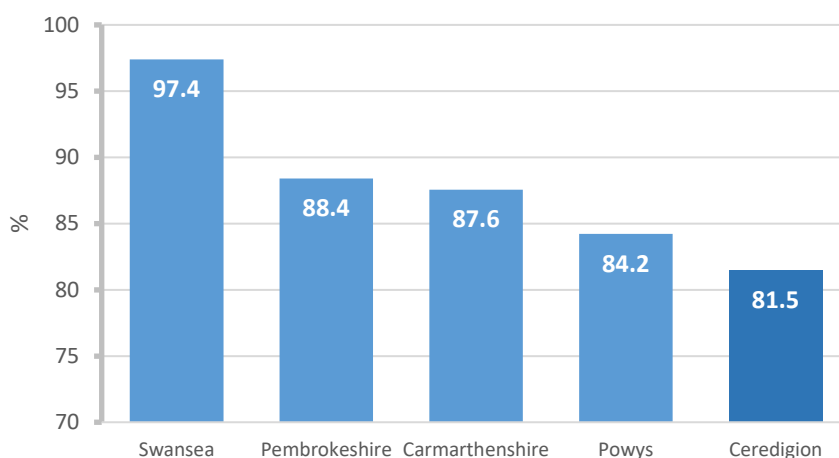


Figure 37: Percentage of premises covered by 4G Mobile Services (based on outdoor signal from all operators)



Similar to broadband, the evidence provided by Ofcom suggests that the challenge in Ceredigion is continuing to extend coverage of the latest mobile technology. We know that building the physical infrastructure requires significant upfront and ongoing investment to maintain and upgrade. This is seen with power and road networks and the same is true for communications, satellite and high-power computing infrastructure. It is also crucial that regulatory drivers incentivise well-targeted investment. The proposed £530m Shared Rural Network programme being negotiated between the operators and Government will aim to extend coverage for all operators well beyond current limits and will have a significant impact on all areas in Mid and South West Wales. The demand from individuals and businesses will of course continue to grow, thus further emphasizing the challenge in developing digital infrastructure in the region.

House Prices and the Economy

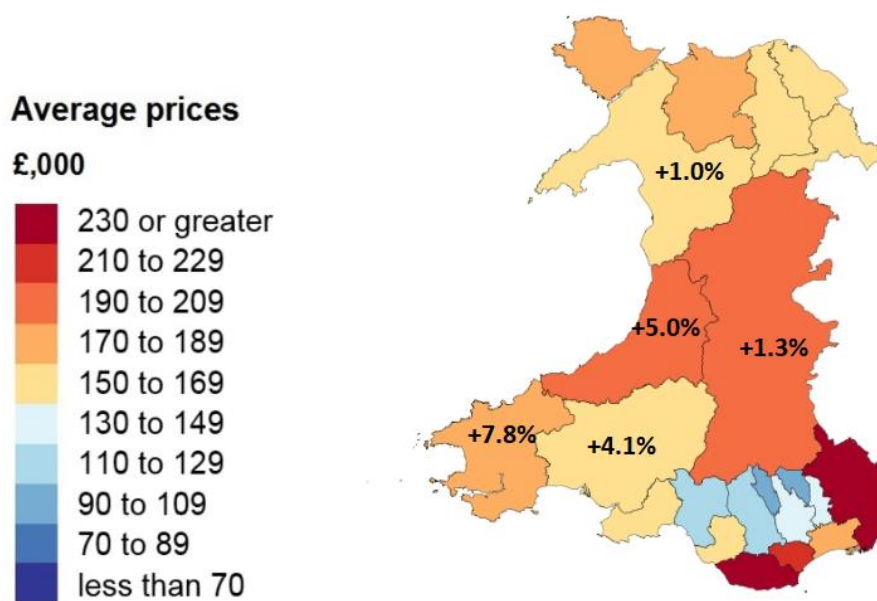
Any analysis of the local economy would not be complete without reference to the strength of the housing market, as it is well-established that house prices affect the economy at large. Rising house prices, for example, generally encourage consumer spending and lead to higher economic growth. While a sharp drop in house prices adversely affects consumer confidence, construction and leads to lower economic growth. Coupled with an economic downturn at the end of the noughties and the introduction of austerity measures in the early teens, it has been a turbulent time for house prices. But how has that manifested itself in the local housing market?

House prices and rents are generally more expensive in and around Aberystwyth town compared with other areas of the county, a result of generally higher demand and turnover, as well as specific effects associated with the housing market for education students. Elsewhere, housing costs tend to be higher in the coastal areas than inland locations.

Average House Prices and Growth Rate

Figure 38 displays average house prices by local authority for Wales and also the growth rates of Ceredigion and its neighbouring local authorities. Across Wales house prices increased by 2.6% to £164,000 in the year to September 2019, down from 5% in the year to August 2019. The region outperformed the UK as a whole, which saw the average property value increase annually by 1.3%. Over the last year, house prices have risen in all 22 local authorities in Wales. Conwy and Pembrokeshire displayed the strongest growth, respectively rising by 7.9% to £172,000 and 7.8% to £182,000 in the year to September 2019. Ceredigion saw the eighth-largest average house price increase of Welsh authorities over the last 12 months, with house prices rising by 5% from £183,203 in September 2018 to £192,346 in September 2019.

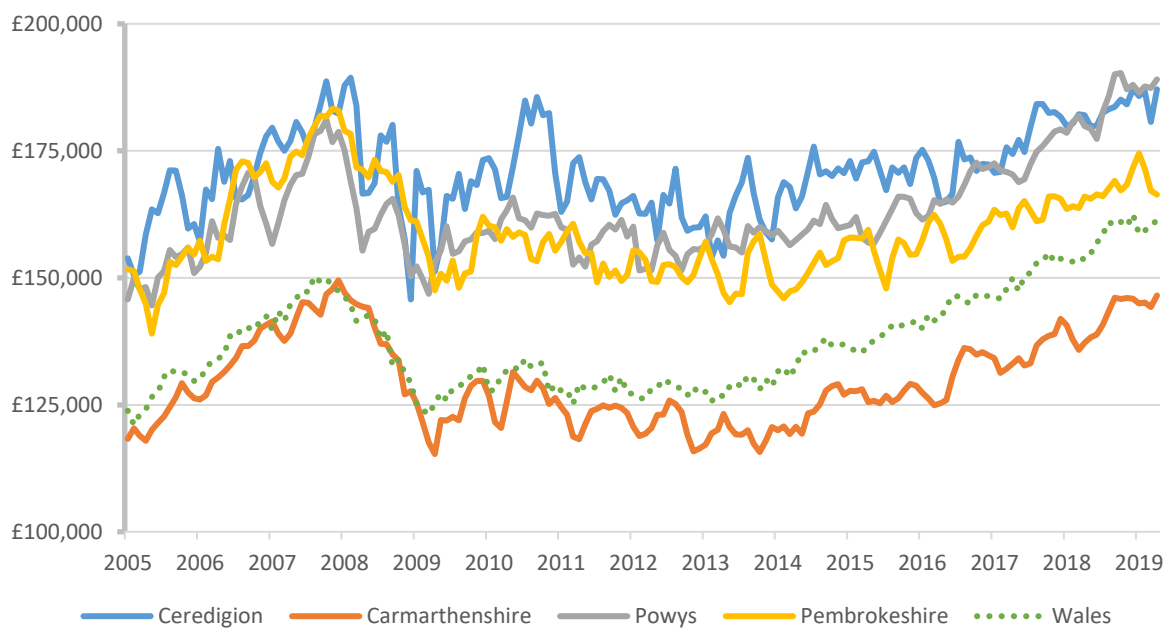
Figure 38: Average house prices and growth rate by local authority for Wales in the year to September 2019 (Source: HM Land Registry, 2019).



Average house price trends for Mid/West Wales (2005-2019) are shown in Figure 39. The average in Ceredigion increased marginally between 2005-2008, from £161,000 to £172,000, followed by a fall to around £162,000 in 2009, a brief recovery in 2010 - 2011, then a further fall over 2012-2013, whereupon house prices gradually picked up over the following six years to approximately £180,000.

This reflects the general trend in house prices across Wales as a whole, although Ceredigion (and more recently Powys) has consistently remained somewhat 20 - 40% higher than the national average. The average homeowner in Ceredigion will have seen their property jump in value by around £24,000 over the last fourteen years.

Figure 39: Average house prices for Mid/West Wales 2005-2019, including Wales' average in GBP (Source: Derived from ONS, 2019).



What is Driving the Increase?

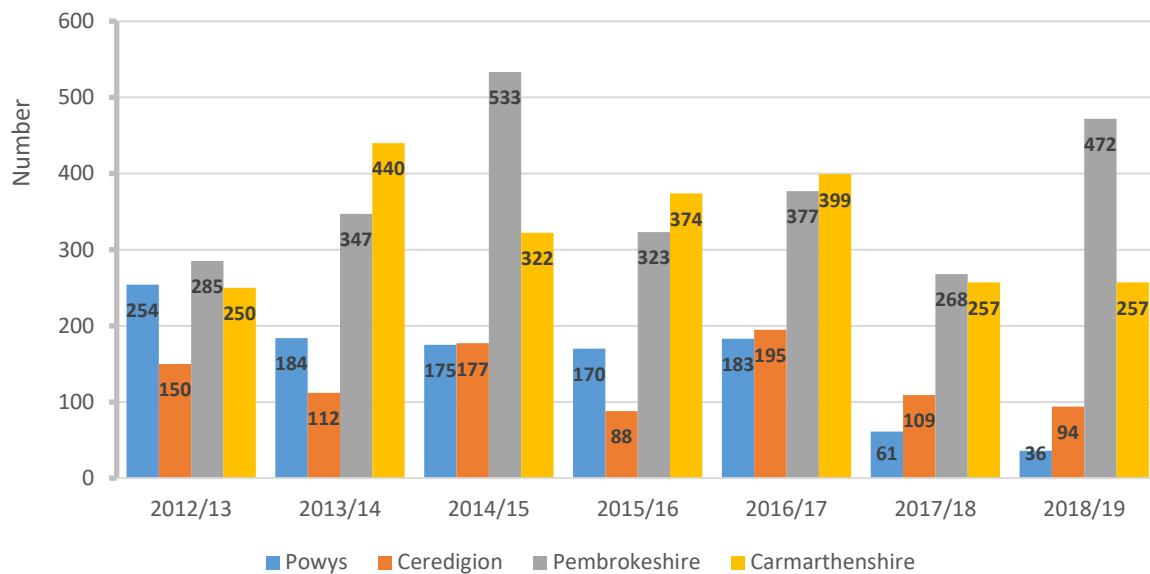
Nationally, the increase in house prices could be attributed to the relatively low interest rates which are currently close to their historic low, and the continuing under-supply of homes (particularly affordable homes). In addition to those national trends, the consistently high price of Ceredigion properties could also be attributed to the areas' desirability as an attractive rural location to live in. For example, average house prices near the coast (e.g. Aberaeron) tend to be 38% higher (at £249,890 in 2019) than Ceredigion's average.¹⁸

New Dwellings

The number of new dwellings that have been built in Ceredigion is the lowest out of the four mid and west Wales local authorities over the seven year period (2012-2019) (Figure 40). The number has fluctuated over the years with a low of 88 in 2015-2016 and a high of 195 in 2016-2017. The number of new dwellings being built appears low, however, it is important to consider that a number of planning applications in Ceredigion were extensions to houses, and not new builds. Moreover, many (approximately 1000) properties in Ceredigion currently lie vacant. Anecdotally,

there are some concerns over the cost of building new homes in the county, due to the relatively small size of the construction sector and the high numbers of micro/small enterprises in the market.

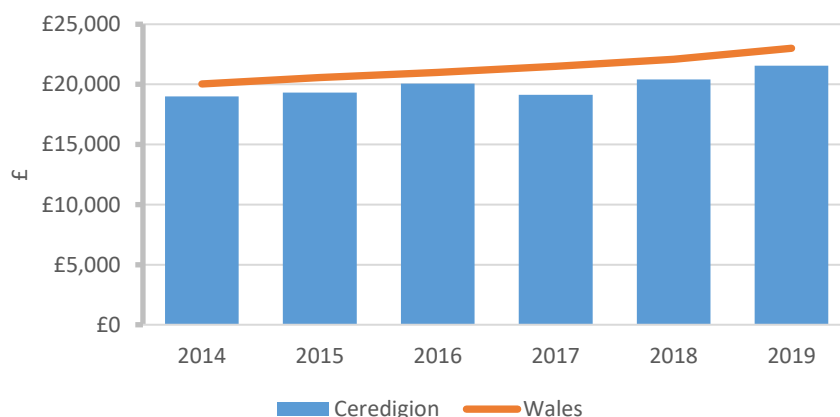
Figure 40: New dwellings for Mid/West Wales from 2013-19 (source: derived from ONS, 2019)



Household Prosperity

Figure 41 shows the annual gross pay for all jobs in Ceredigion and Wales. Over the last five years Ceredigion’s residence-based earnings has generally increased by 13.7% from £18,900 in 2014 to £21,500 in 2019, however, with a slight trough in earnings during 2017. This reduction in earnings in Ceredigion could possibly be attributed to the redundancies made by Aberystwyth University in 2017 (with the aim to save £11m)¹⁹ which may have impacted the local economy. The overall increase keeps pace with the national average, however, Ceredigion’s annual gross pay has consistently remained around 16% lower than Wales as a whole. The mean annual gross pay for all employees in Wales in 2019 (£25,714) is considerably lower than the UK’s average of £30,629 in 2019 (ONS, 2019).²⁰

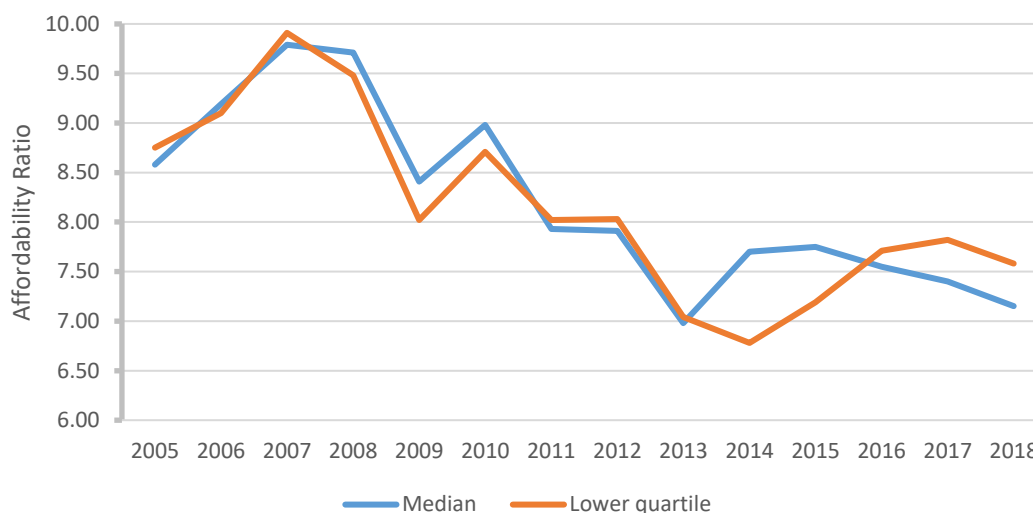
Figure 41: Annual gross pay for all employee jobs based on place of residence for Ceredigion and Wales



Affordability

Affordability can be measured using the ratio of house prices to earnings. A higher ratio indicates that it is less affordable for a resident to purchase a house and conversely, a lower ratio indicates higher affordability in a local authority. Figure 42 shows the workplace-based affordability ratio for lower quartile and median house prices and incomes for Ceredigion.

Figure 42: House price to workplace-based earnings ratio for median and lower quartile (Source: ONS, 2019)



Affordability decreased between 2005 and 2007, being at its lowest in 2007. From 2007 onwards, property has become steadily more affordable. This generally follows the trends in house prices in Ceredigion (see Figure 39) and annual gross pay (see Figure 41), with the increases in annual gross pay being proportionally greater than the upward trend in house prices.

However, although property is becoming steadily more affordable, these ratios still indicate affordability problems in Ceredigion. Studies carried out by Opinion Research Services (2004, 2008, 2015) for Ceredigion County Council have further defined these issues, indicating a backlog of households in housing need, and an on-going housing need, both primarily resulting from affordability issues and the inability of households to enter the housing market at the level of price or rent.

Housing Affordability in Aberystwyth

Aberystwyth is the county's major town due to its significant role as a regional centre. The town has particular housing characteristics due to the substantial number of students in higher education during term-time, whose housing needs tend to differ substantially from the rest of the population. Rental values are significantly higher than seen in the surrounding areas and also vary between different areas of the town, with premiums placed on areas within close proximity to the town centre. These relatively high rental prices in Aberystwyth make it difficult for those who are seeking work in the area, to settle and find affordable homes to rent.

Figure 42: Market Rent Summary - Average and median rental prices

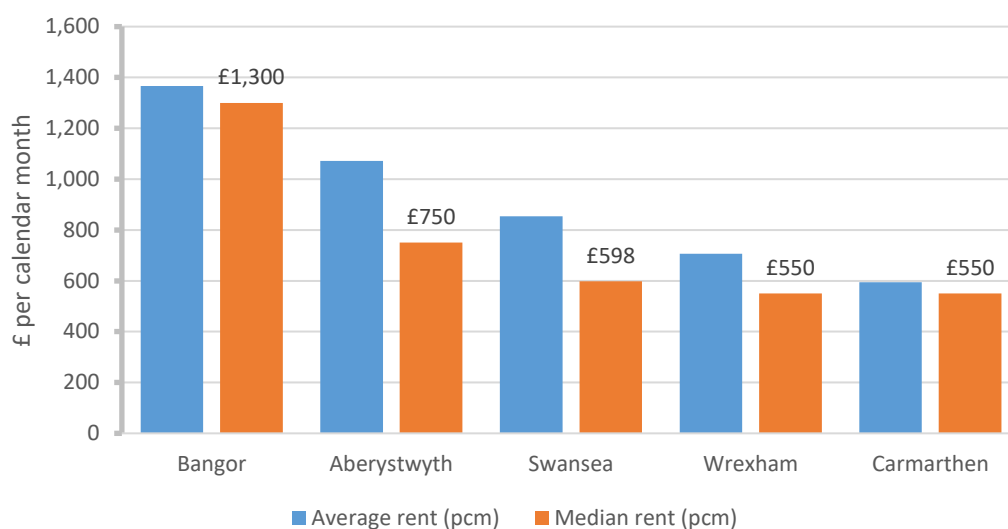


Figure 42 displays the average and median prices per calendar month for rental properties in five chosen towns across Wales²¹. As of January 2020, out of the five areas, Bangor has the most expensive rental sector with the average rental price being £1,366 pcm, with Aberystwyth a close second, with an average rental price of £1,072 pcm. It is significantly more expensive to rent a property in Aberystwyth than it is in Swansea, Wrexham and Carmarthen. On average, properties to rent in Aberystwyth cost £220 more a month than those in Swansea and £477 more per month than those in the neighbouring county's major town, Carmarthen.

Table 14: Property rents in Aberystwyth by Type

	No. of properties	Average rent	Median rent
Room	35	£393	£325
Flat	99	£825	£650
House	121	£1,446	£1,473

Table 14 displays the number of properties in Aberystwyth on the rental market by property type²². There is a higher proportion of houses available to rent, compared to rooms and flats. Moreover, 37% (or 98) of Aberystwyth properties on the market currently have more than five bedrooms, with some as large as fourteen bedrooms. This high proportion could be attributed to the over-supply of larger houses/ Houses in Multiple Occupation (HMOs) due to the expansion of university-owned accommodation and a fall in student numbers. Annual changes in student numbers and time lags in university accommodation have an immediate and often unpredictable effect on demand for housing, which make projections and planning difficult.

Figure 43: Average property rents by numbers of bedrooms

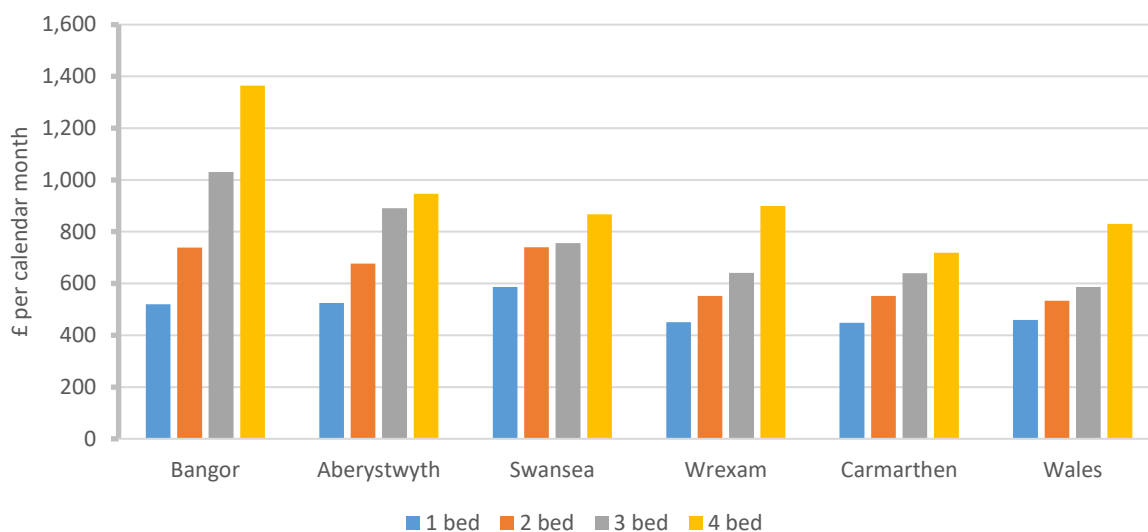


Figure 43 displays the average property rents per month by numbers of bedrooms per property in the five areas and includes the national average²³. For all properties (bedroom sizes 1-4) in Aberystwyth, the average rental price is higher than the national average. Out of the five areas, Aberystwyth is the second most expensive area on average to rent a one, three and four bedroom property. The average rental price for a one bedroom property costs £525 pcm, which is only around 10% lower per month than renting a one bedroom property in the second largest city in Wales (Swansea). It is cheaper to rent a two bedroom property in Aberystwyth compared to Swansea and Bangor, however, prices on average are still high at £677 per month, which is 27% higher than the national average (£533 pcm).

Ceredigion’s Local Housing Strategy²⁴, “Housing For All 2018-2023” sets out in detail the long term challenges for housing faced by Ceredigion, including the issue of affordability, along with the work that has been done to date and aims to promote the help and assistance that is available to citizens to address their specific housing needs. The Strategy is available at: <https://www.ceredigion.gov.uk/resident/housing/housing-strategy/>

In Summary

During the last fourteen years Ceredigion’s house prices have reflected the general trends across Wales as a whole. However, during this period, Ceredigion house prices have consistently remained some 20-40% higher than the national average. These higher prices are associated with Ceredigion being regarded as a desirable place to live, and such price increases have contributed to a backlog of housing need and under-supply of homes (particularly of affordable homes). Although Ceredigion’s annual gross pay for all employee jobs is increasing, it is lower than the average for Wales and significantly lower than the UK average. Although overall, property is becoming steadily more affordable in Ceredigion, the affordability issue still remains for those on low incomes.

Household Income

In its simplest sense, “personal prosperity” can be measured by salaries and household income, and is the most logical place to start, particularly as there is speculation that working age people, particularly the younger age groups just starting out in their careers, are attracted by the pull of higher salaries and career opportunities in the larger urban areas to the south and north of Wales.

The latest data available shows that there could be some truth to that assumption. As anticipated household income in Wales, and in particular rural Wales, is noticeably below that of the United Kingdom as a whole, see Figure 44. The median household income in Ceredigion is £27,754 compared to £27,962 across Wales and £31,979 throughout the UK as a whole. However, whilst Ceredigion’s average household income is below average for Wales, it compares favourably with Powys, Carmarthenshire and even the larger urban area of Swansea, see Figure 45 below.

Fig. 44: Median Income: Wales and UK

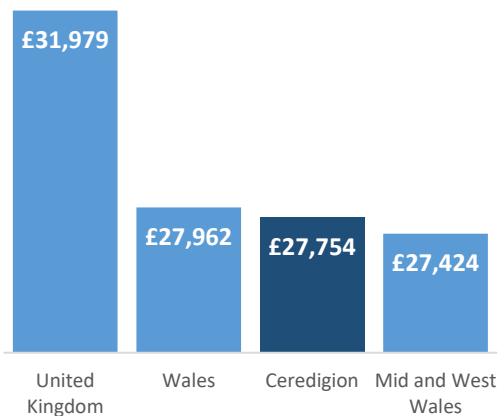
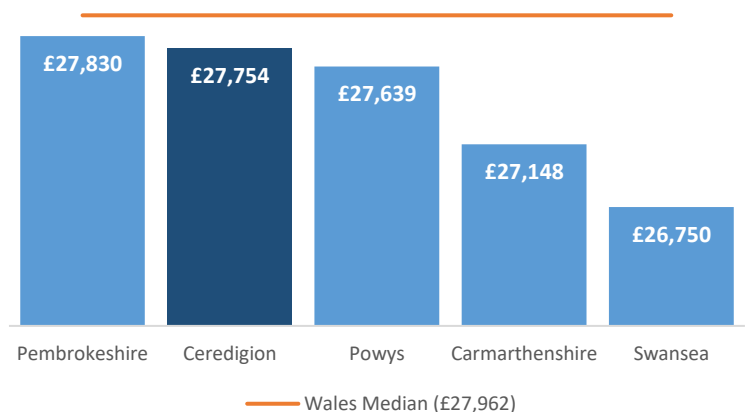


Figure 45: Median Income: Mid and West Wales



Source: CACI Paycheck 2019

At a local level, there is a large variation in the level of average household income across the county. In 2019 the median household income ranged between £18,707 in Cardigan Rhyd-y-Fuwch to £35,508 in Faenor. The areas with the highest household incomes were all in the rural north of the county, while the lowest incomes were in the towns of Cardigan, Aberystwyth and Llandysul, see Table 15.

Table 15: Highest and Lowest Household Incomes in Ceredigion

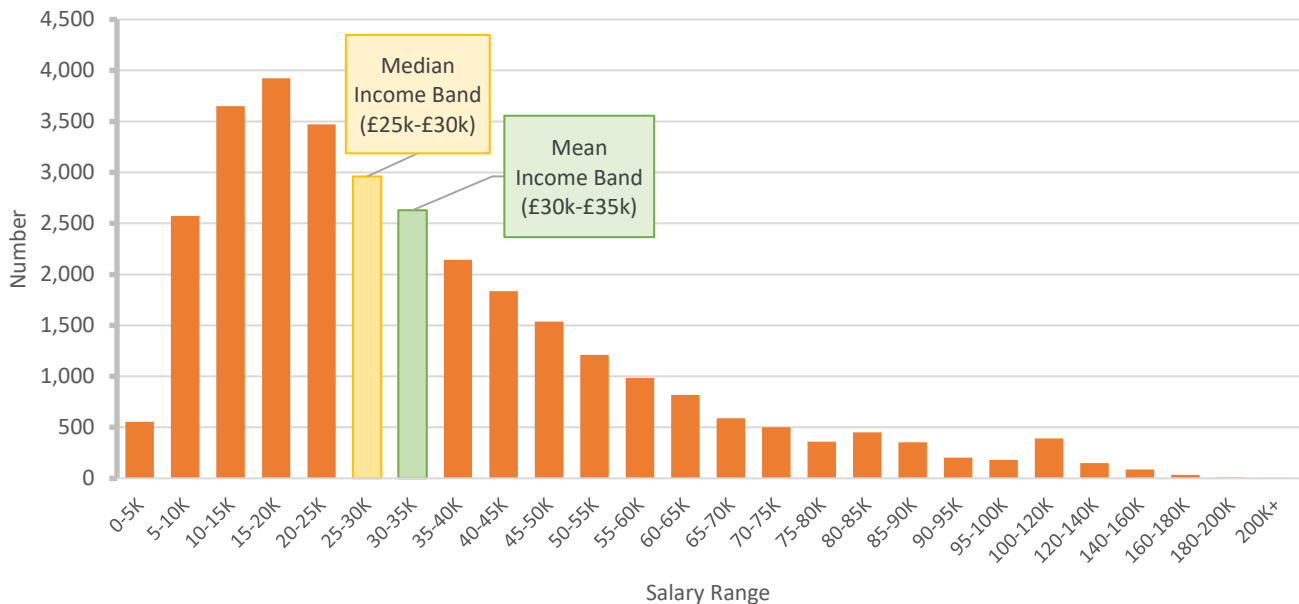
Areas with highest household incomes	Household income	Areas with the lowest household incomes	Household income
Faenor	£35,508	Cardigan Rhyd-y-Fuwch	£18,707
Trefeurig	£34,224	Aberystwyth Rheidol	£21,830
Ceulanamaesmawr	£33,493	Cardigan – Teifi	£22,151
Llanfarian	£33,123	Llandysul Town	£23,313
Melindwr	£32,979	Aberystwyth Central	£23,442

Source: CACI Paycheck 2019

Figure 46 shows the distribution of household incomes across the County, and which clearly shows the wide variation of income. The median income band is £25,000 to £30,000, and the

mean income band is the £30,000 to £35,000²⁵. The highest proportion of Ceredigion households fall within the £15,000-£20,000 band, which equates to 3,922 households out of a total of 31,602. In fact, the majority of Ceredigion’s households (54.2%) have a household income of £30,000 or less, and just over a third (33.9%) have an income of £20,000 or less. At the other end of the scale, 20.0% have an income of £50,000 or more and 2.1% have an income of £100,000 or more.

Figure 46: Distribution of Income in Ceredigion by Income Band



As expected the largest number of households with an income below 50% of the Great Britain median were in the towns of Aberystwyth and Cardigan. Household income refers to income from all household sources including pensions and benefits as well as from salaries, and so to a large extent, the pattern of income across the county will reflect the distribution of different groups such as pensioners, students and benefit claimants. This explains, for instance, the unusually high household income figure for Pembrokeshire which includes incomes from pensions.

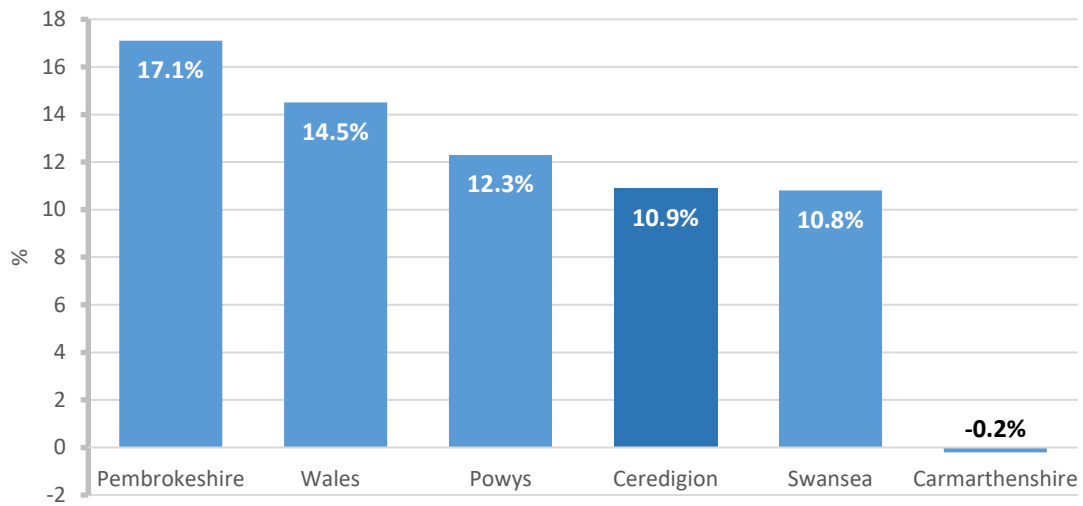
It is also important to bear in mind that changes in commuting patterns, particularly the sharp increase in those commuting out of the county over the last four years, mean that household incomes in Ceredigion are not necessarily available in the immediate locality of the resident. For example, it is likely that the high median income seen in parts of rural Ceredigion is due to the earnings from employment in Aberystwyth rather than the immediate local area. Likewise, due to the relatively high commuting distances of Ceredigion residences, it is also likely that some household incomes are derived from employment in the neighbouring counties of Powys, Carmarthenshire and maybe Pembrokeshire.

The Gender Pay Gap

The gender pay gap is measured by the percentage difference between men’s and women’s hourly earnings. Despite the pay gap in Wales decreasing between 2016 and 2018, in the last year it increased slightly by 0.8%pts to 14.5%. However, in Ceredigion, the pay gap showed the opposite trend, decreasing from 13.3% to 10.9%, which places the county below the national

average, see chart below. Carmarthenshire is one of only two counties in Wales to have a negative pay gap, i.e. where women earn more than men, the other being Merthyr Tydfil.

Figure 47: Gender Pay Gap Ratio in Mid and South West Wales 2019



Ceredigion has consistently been below average since monitoring of the gender pay gap began. In the UK as a whole, although the gap continues to decrease, it is much higher at 17.3%, meaning that women currently make approximately 80% of men's median hourly wages.

More than Material Wealth

“ Prosperity is not just about material wealth – it is about every one of us having a good quality of life, and living in strong, safe communities ”

– Prosperity for All: The National Strategy for Wales²⁶

In its *Prosperity for All: The National Strategy* document, Welsh Government identifies that prosperity transcends material wealth and is influenced by any number of other, more intangible, factors, such as quality of life, the environment we live in and our personal safety. We all value different things in life, and it is the combination of these factors that determine our overall prosperity and sense of wellbeing. It is a complex combination of an individual’s physical, mental and emotional health, and not surprisingly, it is difficult to define.

Defining Wellbeing

At a national level, Welsh Government is interested in the wellbeing of Wales *as a whole* and has defined the term through its seven national wellbeing goals. More locally, the latest Ceredigion Public Services Board Assessment of Local Wellbeing²⁷ asked people across Ceredigion what wellbeing means to them. The responses showed that **health** and **happiness** were the two most commonly identified terms.

Health

Measuring wellbeing in these terms is highly subjective, but the national Census does provide an insight into resident’s health – Ceredigion has a higher proportion of its resident population stating that their health was either *good* or *very good* compared to Wales as a whole – 79.2% in Ceredigion compared to the national average of 77.8%. Conversely, those stating their health was either *bad* or *very bad* was lower in Ceredigion at 6.3% compared to the national figure of 7.6%, see Figures 48 and 49 below.

Figure 48: Residents in good or very good health

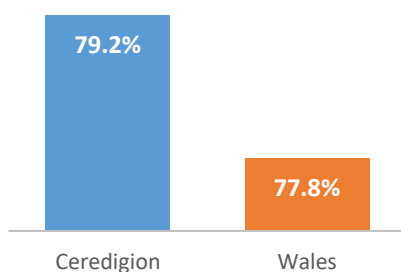
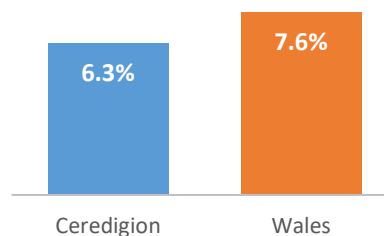


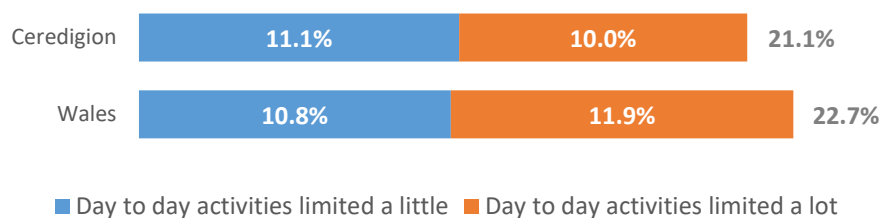
Figure 49: Residents in bad or very bad health



It follows that residents with a limiting long-term health condition in Ceredigion (21.1%) is lower than across Wales (22.7%). (The term “limiting long-term illness” is a proxy for disability in the

Census). This is also true of residents with a condition that limits their day-to-day activities a lot – 10.0% in Ceredigion compared to 11.9% nationally, see Figure 50.

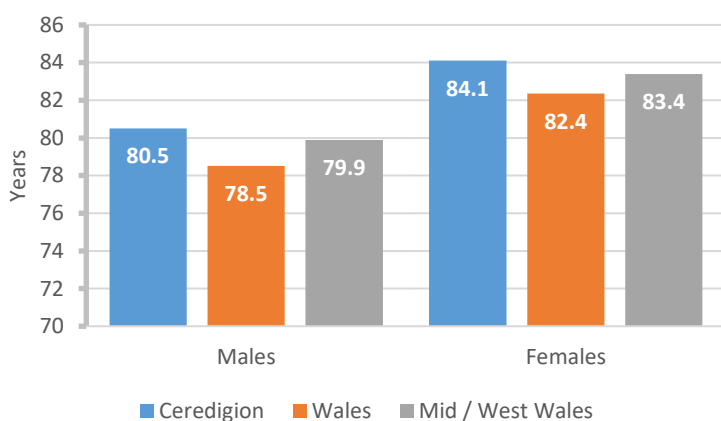
Figure 50: Limiting long-term illness



Furthermore, this is also reflected in the provision of unpaid care, where the 11.3% of Ceredigion's residents who provide some unpaid care is lower than the national average of 12.1%.

Life expectancy in Ceredigion is also good – at birth the expectancy for males is 80.5 years and 84.1 years for females, both of which are above the national averages for males and females respectively. This also compares favourably to other parts of mid and west Wales, where the expectancy for males is 79.9 and for females is 83.4.

Figure 51: Life expectancy at birth

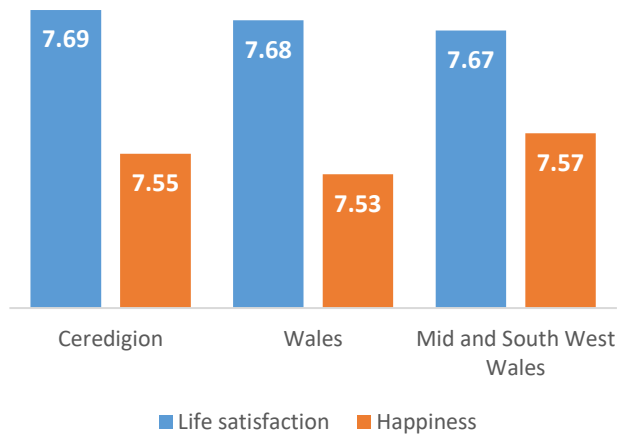


Life expectancies across Wales have been gradually increasing over the last twenty years, and the same is true in Ceredigion, where the expectancy at birth for males has increased from 75.0 years to 80.5 years, and for females 80.3 years to 84.1 years.

Happiness and Life Satisfaction

Measuring "happiness" is subjective and therefore very difficult to do. Nevertheless the Annual Population Survey 2019²⁸ shows that overall *life satisfaction* in Ceredigion remains relatively high in comparison to the Mid and South West Wales region and the national average. Satisfaction is measured on a scale of 1-10 and the average is used to determine the overall result for an area. The result of 7.69 for Ceredigion is above the average of 7.67 for Mid and South West Wales and the national average of 7.68 (Figure 52). Life satisfaction has also shown an increase over the last year, rising from 7.60 in 2017/18.

Figure 52: Life satisfaction and happiness



A very similar trend was visible when asked about feeling *worthwhile* – Ceredigion’s score of 7.94 was again above the national average of 7.88 and the regional average of 7.92. When asked directly about feeling *happy*, Ceredigion again scored above the national average with a result of 7.55 compared to 7.53 for Wales as a whole. This provides further evidence to demonstrate that Ceredigion is considered a healthy and happy place in comparison to many other parts of the country.

Safety and Security

According to the Public Services Board’s survey, some of the other factors identified by respondents that affect wellbeing were **safety** and **security**. Crime rates in Ceredigion are some of the lowest in the UK, and the latest figures show that the actual number of crimes in Ceredigion have continued to decline, falling from 4,366 for the twelve months up to 31st March 2017 to 3,725 to 31 December 2018. The crime rate per 1,000 population is lower than the surrounding areas of Carmarthenshire and Pembrokeshire and but higher than Powys, although Ceredigion is the only area in Mid / West Wales to see a decrease in its crime rate over that period.

Figure 53: Crime rate in Ceredigion per 1,000 population

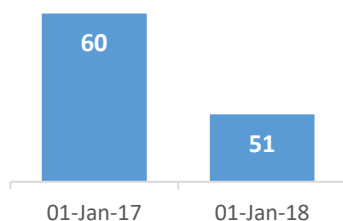
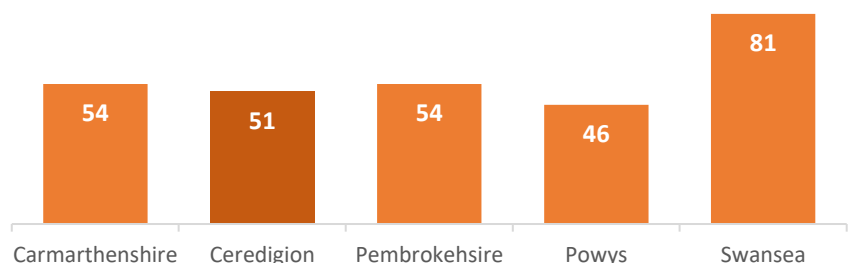


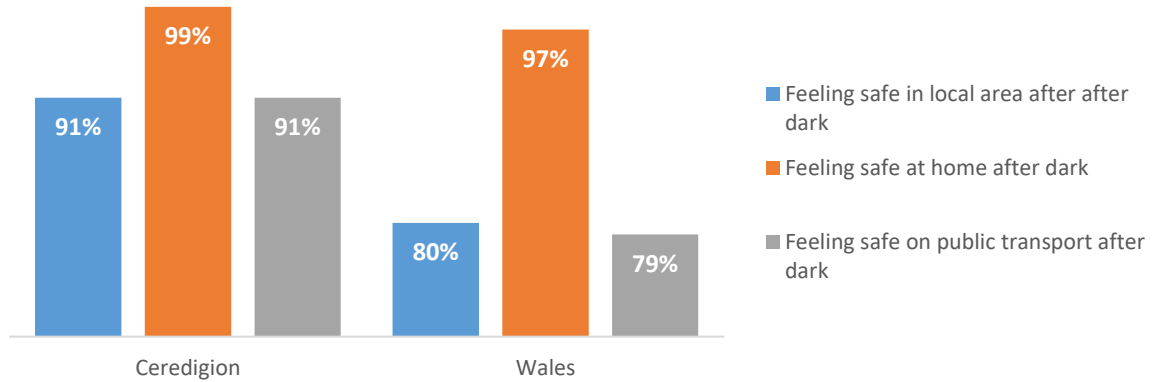
Figure 54: Crime rate per 1,000 population - Mid / South West Wales



It is well known that the fear of crime is often greater than the probability of it actually happening. However, in Ceredigion residents feeling safe continues to score very highly in the National Survey for Wales²⁹. For example, residents feeling *safe or very safe in the local area after dark* was the

second highest result nationally at 91%, feeling *safe at home after dark* was the joint highest result nationally at 99% and feeling *safe on public transport after dark* was the highest result nationally at 91%, see Figure 55.

Figure 55: Feeling safe after dark

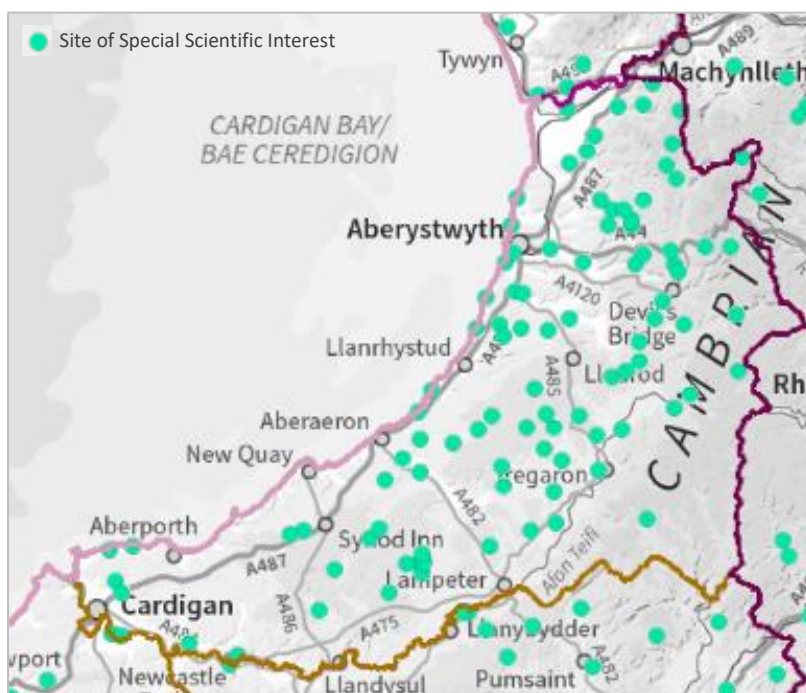


The Environment

Residents also identified the **natural environment** as affecting their wellbeing. This is not surprising as one of the main attractions of the county to both residents and visitors is its beautiful coastline, its beaches and its picturesque rural landscape. It follows that the county is also well known for its wildlife - for example, the coastline and estuaries of Cardigan Bay are important habitats for sea birds whilst in its waters Bottlenose Dolphin, Harbour Porpoise and Atlantic Grey Seal can be seen.

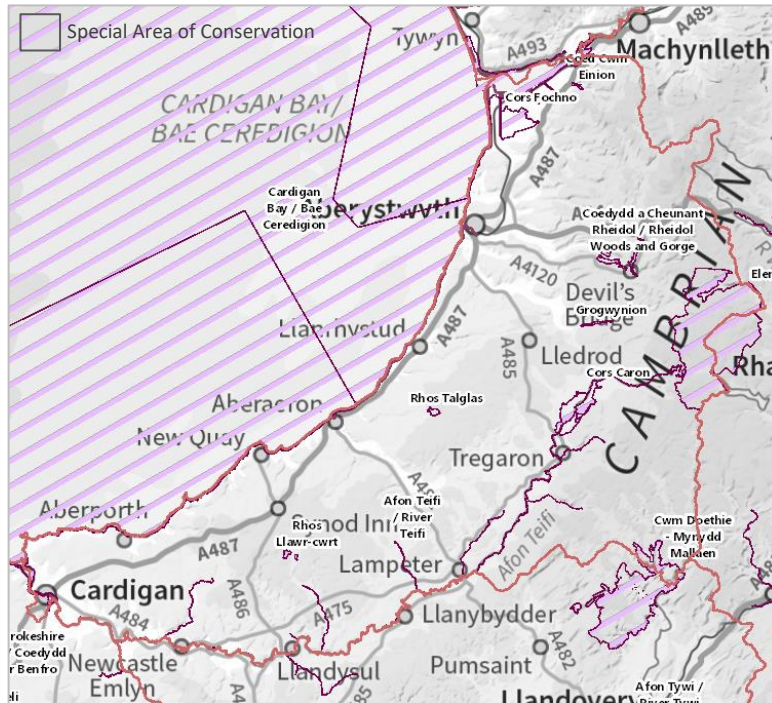
The importance of the natural environment is demonstrated through its statutory nature conservation designations. There are, for example, just over 100 Sites of Special Scientific Interest (SSSI's) in Ceredigion. SSSI's are used to denote a protected area in the UK, and the location of each is shown in the map in Figure 56.

Figure 56 – Sites of Special Scientific Interest in Ceredigion



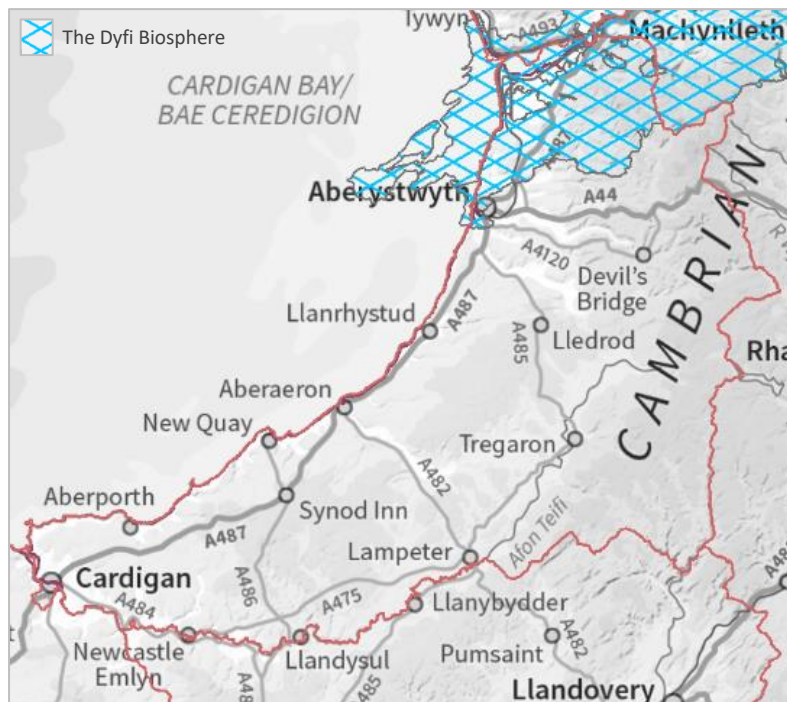
There are also 7 national nature reserves and 14 Special Areas of Conservation (Figure 57) defined in the European Union's Habitat's Directive to protect habitats and species considered to be of European interest.

Figure 57 – Special Areas of Conservation in Ceredigion



On its northern border with Gwynedd, lies the Dyfi Biosphere, one of only six in the UK. A biosphere reserve is an ecosystem with plants and animals of unusual scientific and natural interest. This status, set by UNESCO, is to promote the management research and education of the ecosystem, and encourages communities to work together in creating a sustainable future.

Figure 58 – The Dyfi Biosphere

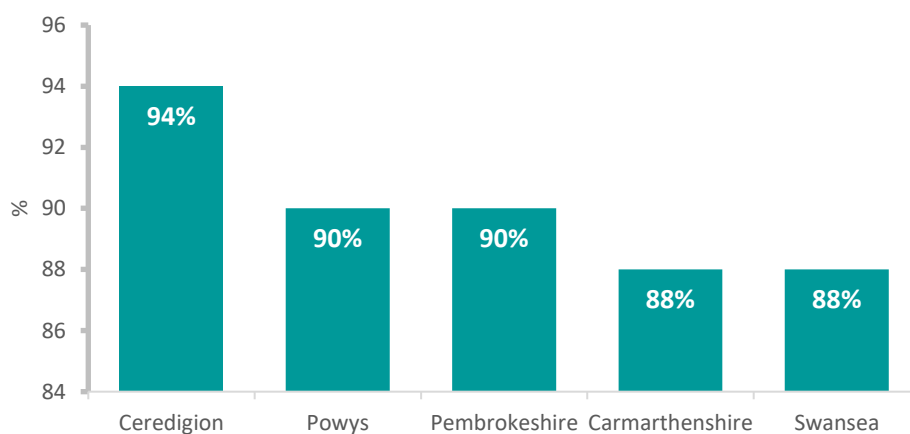


The health and wellbeing benefits of these examples are widely acknowledged and include the obvious physical benefits of a healthy environment such as good air and water quality. But being close to nature and the natural environment also play a role in our mental wellbeing through improving social interaction and cohesion. Proximity to greenspace has been associated with lower levels of stress and reduced symptomology for depression and anxiety, while interacting with nature can improve cognition for children with attention deficits and individuals with depression.

Linked to this are the opportunities for physical exercise and recreation provided by the 60km of the Wales Coastal Path running between the Teifi and Dyfi estuaries. The path links towns and villages along the Cardigan Bay coastline and is complemented by a wealth of wildlife and history for walkers to enjoy. There are countless other examples that demonstrate the quality of the natural environment in Ceredigion and their role in strengthening health and wellbeing amongst residents and visitors alike – the Heritage Coast between the Teifi and Dyfi estuaries, the Teifi Valley, local nature reserves and Special Areas of Conservation to name a few. A 2016 report by the World Health Organisation³⁰ concluded that green spaces offer numerous public health benefits, focusing on psychological relaxation, stress reduction and enhanced physical activity.

It is therefore not surprising that the results from the latest National Survey for Wales³¹ show continued high levels of satisfaction with the local area – 94% said they were satisfied, which is not only the highest result amongst the South and West Wales region (Figure 59), it is also the highest result of any local authority area in Wales. Other indicators relating to the environment show similarly high results – satisfaction with the quality of local green space was 91%, again the highest result in the region and one of the highest results in Wales, and 89% said the local green space was peaceful, which was the joint highest result nationally.

Figure 59: Satisfaction with the local area 2018/19 (Mid and South West Wales Region)

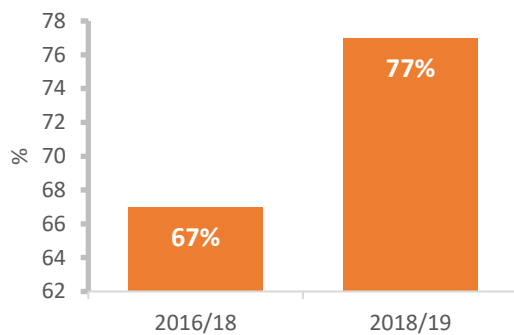


Climate Change

However, with this comes a sense of responsibility to protect and preserve the natural environment today and for future generations to enjoy. Concern for the environment, and in particular climate change, has never been greater. This is reflected in the National Survey of Wales

2018/19 where 93% of respondents across Wales believe that the climate is changing. Furthermore, the level of concern for climate change is increasing, rising from 67% being fairly or very concerned in 2016/17 compared to 77% in the latest survey for 2018/19 (Figure 60).³²

Figure 60: Concern for climate change across Wales



Regardless of the causes, whether natural changes, man-made or a combination of both, the scientific evidence suggests that global temperatures are rising faster than at many of other times in history, that the concentration of CO₂ in the atmosphere is higher than at any time in at least 800,000 years, average sea levels across the globe have increased by 3.6mm per year between 2005 and 2015, and satellite records show a dramatic decline in Arctic sea-ice since 1979.³³

Scientists believe we are adding to the natural greenhouse effect, with gases released from industry and agriculture trapping more energy and increasing the temperature. According to the World Meteorological Organization, the world is one degree Celsius warmer than before widespread industrialisation. One of the expected impacts of climate change is an increase in the frequency of extreme weather events.³⁴

In Ceredigion, the impact of climate change can be seen in several locations, but none more visible than the impact of sea level rises to Tanybwllch beach, where the shingle bank acts as a barrier between the sea and the land. The shingle ridge is one of Ceredigion's Sites of Special Scientific Interest. However, rising sea levels and more frequent storms have caused increasing concerns that this defence could be breached. This is just one example of the impact of how global warming is affecting the coastline of Ceredigion and Wales. Research conducted between Ceredigion County Council and National Resources Wales is hoped to inform plans for managing the effects of climate change at Tanybwllch and along Ceredigion's coastline.

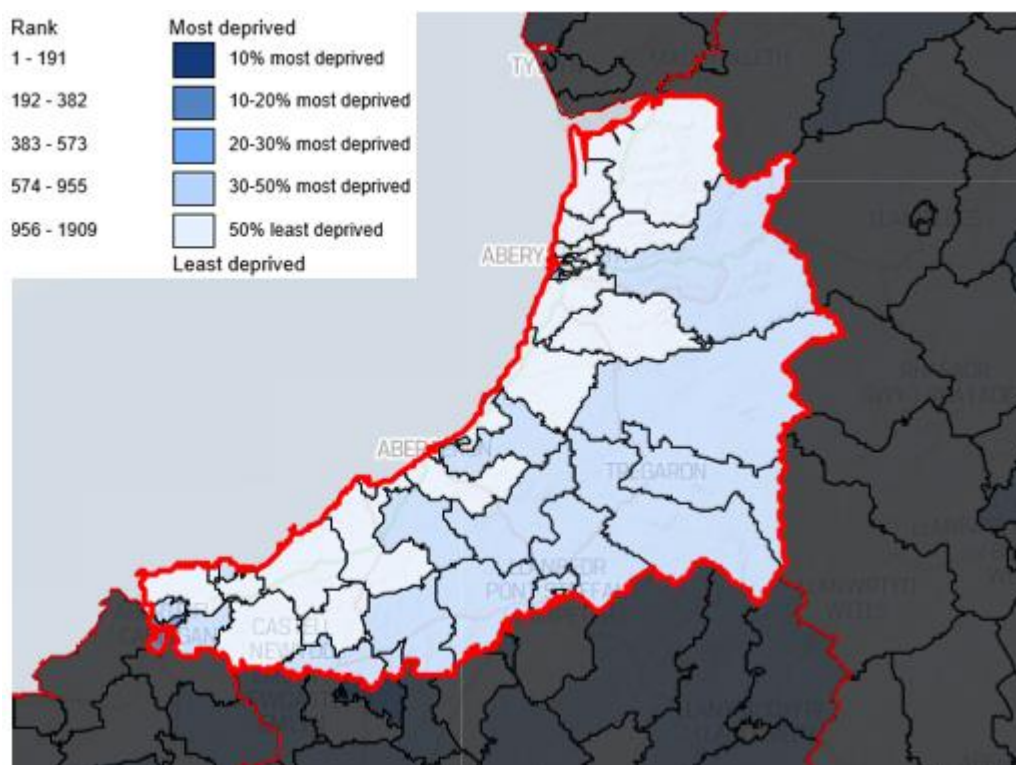
The Local Biodiversity Action Plan for Ceredigion was produced in 2002 by the Ceredigion Biodiversity Partnership, which comprises a range of organisations with responsibilities for wildlife. The Plan focuses on some of the most significant elements of Ceredigion's natural environment, taking account of national objectives and targets.

We also know from the national survey of Wales that of all the actions the government should take to limit the impact of climate change, more use of renewable energy (for example wind or solar) was considered the most important by respondents, with 73% stating the government should take this action³⁵. The generation of renewable energy plays a key role in Ceredigion, and this is discussed in more detail in the Energy section later in this report.

Deprivation

Deprivation is often mistaken as being solely related to affluence. However, deprivation is multifaceted and refers to unmet needs which are caused by a general lack of resources and opportunities in our society, both material and social, e.g. in terms of health and education. The Welsh Index of Multiple Deprivation (WIMD), published by the Welsh Government in 2019, provides a relative measure of deprivation for small areas or Lower Layer Super Output Area (LSOAs) in Wales. WIMD combines scores across eight domains to produce an overall relative measure of deprivation, ranking all small areas in Wales from 1 (most deprived) to 1,909 (least deprived). WIMD is a relative measure and only provides a measure on whether an area is more or less deprived than all other areas in Wales; it does not provide a measure of the level of deprivation in an area.

Figure 61: Welsh Index of Multiple Deprivation 2019 - Ceredigion³⁶

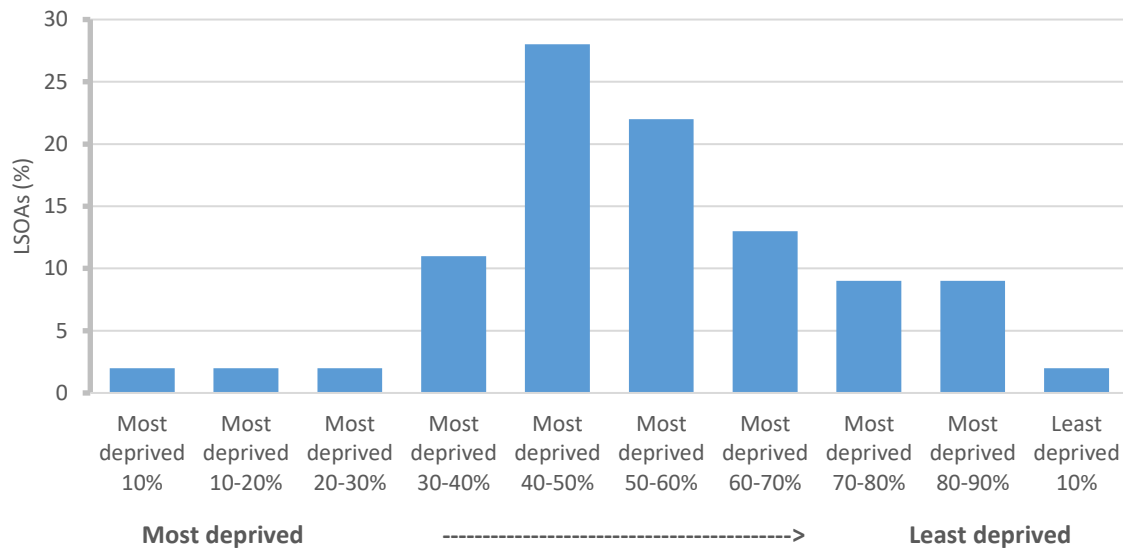


(Source: Welsh Government, 2019)

The map in Figure 61 displays the geographical distributions of the overall WIMD index across Ceredigion, grouped by ranks and deciles. Within Ceredigion, there are only a few pockets of high relative deprivation at LSOA level in the north and south of the county (Aberystwyth and Aberteifi/Cardigan area). According to WIMD, three out of Ceredigion's forty-six areas are in the most deprived 30% of LSOAs in Wales. The LSOAs that are amongst the 30-50% most deprived are located further inland, in East Ceredigion whereas the areas that are within the 50% least deprived tend to be situated near the coast.

Figure 62 shows, for the WIMD 2019 overall Index, the percentage of LSOAs in Ceredigion which were in the most deprived in Wales grouped into deciles. The highest proportion of Ceredigion's LSOAs (28% or 13 areas) fell into the most deprived 40-50% in Wales.

Figure 62: Percentage of Ceredigion's LSOAs in deprivation grouped by decile for the WIMD 2019 overall index



(Source: derived from WIMD, 2019. Note: figures may not sum due to rounding)

The area which is ranked the most deprived in Ceredigion is the Aberteifi/Cardigan – Teifi area, followed by Aberteifi/Cardigan – Rhyd-y-Fuwch and Aberystwyth Penparcau 1, which are the 125th, 370th and 533rd most deprived LSOAs in Wales respectively. The area which is ranked the least deprived in Ceredigion is Faenor 1, located within the town of Aberystwyth. Faenor 1 is ranked 1875th out of the LSOAs in Wales, which places it in the 10% least deprived LSOAs in Wales. This high ranking area encompasses most of the student village (Pentre Jane Morgan), contrasting with the national trend, whereby student areas are often regarded as being more deprived due to their association with higher crime rates, littering and poorer housing. It is therefore noteworthy that, Faenor 1 and Penparcau 1 are both situated in Aberystwyth. These disparities in the concentrations of multifaceted deprivation in Ceredigion serves as a reminder of the wide gap of opportunities that can exist within a county and in communities situated in close proximity to one another.

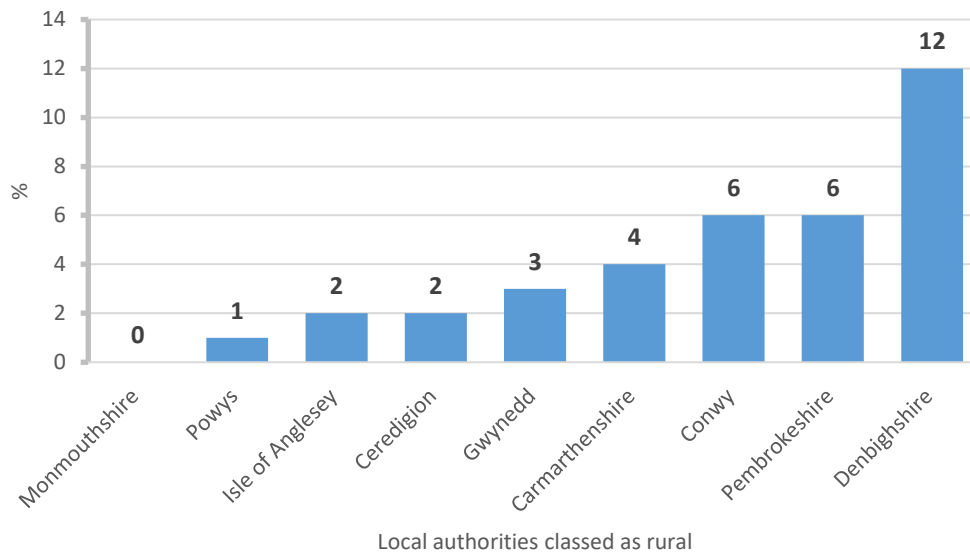
Notably, within a rural area, deprived people tend to be more geographically dispersed than in urban areas. Deprivation in rural areas often exists at street scale rather than whole neighbourhoods. The WIMD 2019 analysed deprivation at the LSOAs level; such analysis may conceal small pockets of deprivation within Ceredigion LSOA's.

Ceredigion's position on the WIMD relative to rural Wales

At local authority level, the WIMD can be summarised by looking at the proportion of areas within the local authority that are in the most deprived 10%. Using this form of analysis, Ceredigion performs well, having the third lowest proportion of areas in the most deprived 10% (joint with the Isle of Anglesey) in Wales. In comparison to its neighbouring local authorities, Powys fares slightly better than Ceredigion, whilst Carmarthenshire and Pembrokeshire had a higher proportion of

LSOAs in the most deprived 10%. Figure 63 displays these differences across the local authorities classed as 'rural' in Wales. Thus, 36% of all LSOA's in the most deprived 10% of LSOA's throughout Wales are in rural Local Authorities.

Figure 63: Percentage of local authorities' LSOAs in the most deprived 10% of all Welsh LSOAs

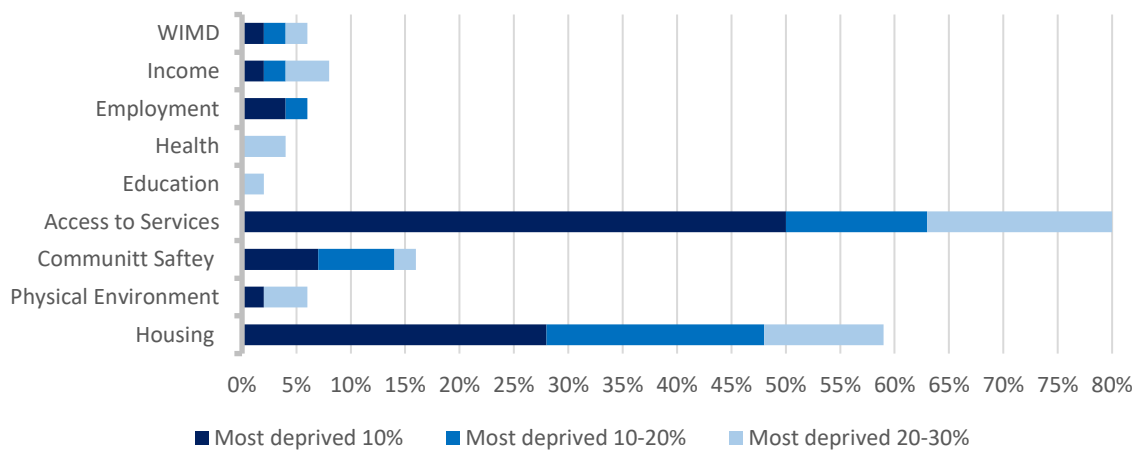


(Source: WIMD, 2019)

Drivers of Deprivation: The Domains

The WIMD is made up of eight domains which capture different dimensions of deprivation which are; income, employment, health, education, access to services, community safety, physical environment and housing. Each domain is compiled from a range of different indicators. Figure 64 shows the most deprived 10-30% by domain in Ceredigion. Ceredigion fares worst on *access to services* and *housing*. The domains which do relatively well are *education* and *health*.

Figure 64: Proportion of deprived areas in Ceredigion by domains



(Source: WIMD, 2019)

The **Access to Services** domain measures travel time to nine key services. These are both physical access (e.g. the average return travel time to a food shop) and digital access (e.g. the proportion of homes/small businesses unable to receive superfast broadband). On this measure, in relative terms, Ceredigion is extremely deprived with half of the local authority's LSOAs falling into the most deprived 10% in Wales. Ceredigion is ranked the second most deprived in Wales on this measure (Powys ranks first). For this domain, the Ceredigion LSOAs Penbryn, Lledrod, Capel Dewi and Melindwr respectively rank the 10th, 14th, 16th and 18th most deprived LSOAs in Wales.

The **Housing** domain identifies inadequate housing, in terms of physical living conditions, and availability. The domain includes measures such as overcrowding and likelihood of poor quality housing (e.g. the probability of housing being in disrepair or containing serious hazards). In this domain, over a quarter (28% or 13 areas) of Ceredigion's LSOA's fall into the most deprived ten per cent of areas in Wales. This is the highest proportion nationally.

Surveys of housing conditions have identified that Ceredigion has a high proportion of older housing stock, which often have problems of excessive cold and damp, as well as fall and trip hazards (Adamson, 2007). These issues may be exacerbated in rural areas such as Ceredigion, which may be subject to more exposed conditions and do not have access to mains gas systems. Ceredigion's relative position is driven by poor quality housing in sparse villages (Llansantffraed 1, Lledrod and Melindwr), and by relatively high overcrowding rates in a few areas in towns (Aberystwyth, Lampeter and Cardigan).

The **Education** domain captures the extent of deprivation relating to education, training and skills. This was Ceredigion's least deprived domain with none of its areas falling within the 20% most deprived in Wales. In fact, nationally, Ceredigion had the lowest proportion of areas (22% or 10 areas) in the most deprived 50% in Wales.

Ceredigion's worthy relative position is driven by its low average of repeat absenteeism (3.5%) and low percentage of adults aged 25-64 with no qualifications; 14.5% (33% lower than the national average). In addition, Ceredigion's high KS4 (GCSE) average point score in core subjects of 126.7 is the second highest average score nationally.

Conclusion

Overall, Ceredigion has relatively low levels of deprivation. Ceredigion performs well in most of the domains, particularly in terms of having low levels of deprivation in health and education. However, housing and access to services ranks poorly, the latter being primarily a rural phenomenon.

However, there are ongoing concerns that rural deprivation is not adequately reflected in the WIMD. This is because experiences of deprivation in rural authorities such as Ceredigion occur on a smaller scale and are often hidden and unaccounted for. Area-based measures are less appropriate to identify dispersed rural disadvantage and can therefore underplay levels of rural deprivation. Furthermore, many of the indicators do not specifically relate to rural issues, such as housing affordability, cost of living and access to employment. This view is shared by many in rural local authority areas including Ceredigion.

Rurality and Ceredigion

Rurality is an important factor in life in Ceredigion: over half the population live outside the main towns, either in the smaller towns or villages or in the open countryside. Whilst living close to the natural environment brings substantive wellbeing benefits, it can also affect how people access services and the way in which those services are provided, such as housing or care in later life.

Whether it is a question of commuting into town for work or delivering a utility such as phone coverage to a house in the country, it costs more to provide and access goods, services, jobs and social opportunities in rural areas.

It is difficult to sustain the provision of a range of everyday goods and services in smaller settlements, even in the small market towns that provide service centres to the rural areas, demand is scattered across a wide area; increased use of digital channels and commuting means more is provided by suppliers outside the local community; public organisations e.g. the Post Office and businesses are continually reviewing the feasibility of providing small scale-locally based services.

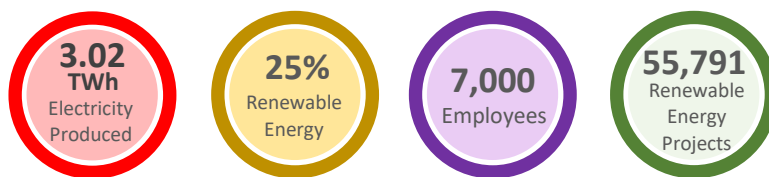
Providing high level services (such as specialist health diagnosis or treatment) at locations accessible to people living in rural Ceredigion will always be a challenge. Aberystwyth and Carmarthen may be locally important centres, but in the longer scheme of things they are small towns with relatively low catchment populations and would not be expected to host a complete range of high level services. There will always be questions over the balance between the cost of a service, its optimum catchment population and accessibility for people living in remote areas.

Changes to the economic, technological and social context will mean that the way services are provided to or used by people in rural areas will be continuously reviewed. Digital channels will provide both a challenge and an opportunity. Many businesses and organisations are moving their main business to digital, which may see the disappearance of services from local high-streets. On the other hand, intelligent design of services around digital channels could provide a greatly enhanced range of more responsible services for people living in rural areas.

The Energy Sector and the Economy

The energy sector is important to Wales – the country is a net exporter of energy to the rest of the UK and the wider European electricity network, generating an estimated 30.2TWh (terawatt hours) of electricity in 2018. The sector contributes to the nation’s economic growth through the creation of jobs and value in the generation and distribution of energy throughout the UK, with the value to the economy estimated to be £1.52bn in 2018³⁷. There are, for example 7,000 people directly employed in the energy industry in Wales³⁸. In addition, the energy industry is also a large investor and purchaser of goods and services from other sectors. Figure 65 summarises the value of the Energy sector in Wales.

Figure 65: Value of the Energy Sector in Wales 2018



The Role of Renewable Energy

Furthermore, Wales is a centre for the generation of *renewable* energy – an estimated 25% of the energy produced in Wales is from renewable sources, and this has been increasing in recent years as the drive to reduce carbon emissions grows in order to meet Welsh Government’s target of meeting 70% of Wales’ electricity demand from renewable sources by 2030. There are over 55,000 renewable energy projects underway nationwide, with almost 3,500 in Ceredigion alone, and which are estimated to generate 656GWh (gigawatt hours) of electricity.

Locally owned renewable energy capacity has also been increasing, and the economic social and environmental benefits from local involvement in energy creation is recognised by Welsh Government. Wales is currently 78% of the way to achieving Wales’ energy strategy target of 1GW of locally owned renewable energy capacity by 2030 with capacity reaching some 783MW in 2018. Table 16 shows the renewable energy production in the UK by different technology, and clearly demonstrates the significant contribution that Wales makes to total renewable energy generation in the UK.

Table 16: Renewable Energy Production in the UK by technology in Megawatts (MW)

Country	Solar	Hydro	Wind	Bioenergy
Wales	982	169	1,846	248
England	11,449	44	10,078	6,862
Northern Ireland	323	11	1,396	122
Scotland	334	1,655	8,423	454

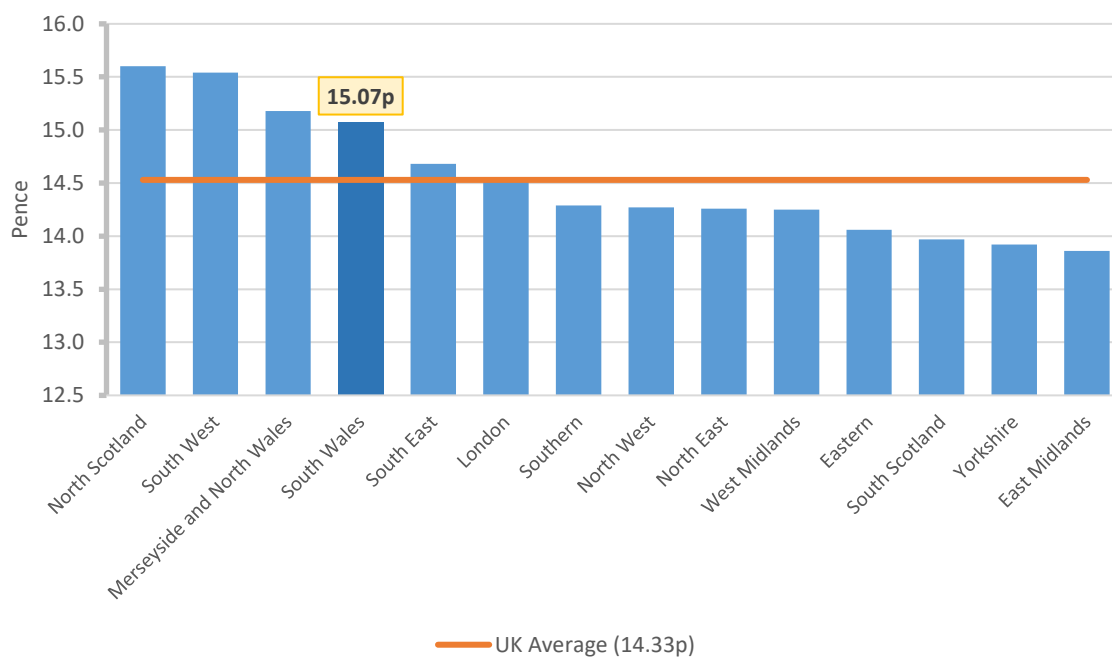
Renewable Energy in Ceredigion

Renewable energy is particularly important in Ceredigion, as the county has the highest percentage of its electricity consumption met by renewable electricity generation. This is due in part to its relatively high amount of renewable energy production, including hydropower, onshore wind and biomass electricity. For example, the county is home to the Rheidol Power Station, the largest hydropower project in Wales and overall, and it follows that Ceredigion is the largest generator of hydropower in the country.

Energy Costs

The issue of energy costs is equally important to business and individuals, as after all, energy underpins the economy and is an input for nearly all goods and services. The latest data from UK Power³⁹ (Figure 66) shows how costs in South Wales (including Ceredigion) compare to the rest of the UK. The unit cost per kilowatt hour for South Wales is above average nationally at 15.07p and one of the highest costs across the UK.

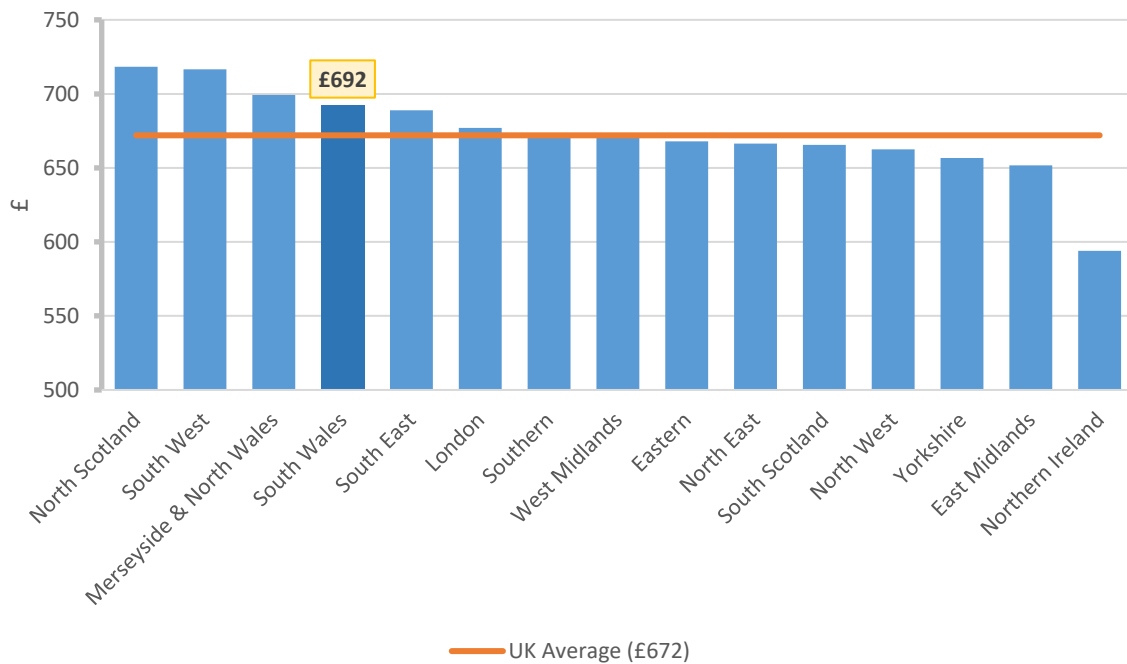
Figure 66: Pence per kWh across the UK



Electricity and gas bills across the UK vary between areas even if the circumstances are exactly the same and the same amount of energy is used. There are a variety of reasons for this including the charges applied by the distribution networks in an area and the demand for electricity at a certain moment in time. Furthermore, costs are affected the number of people in an area - if an area is densely populated then energy suppliers can buy in bulk from the generators, thus reducing costs. Unfortunately, the opposite is true of the more sparsely populated areas, which has implications for Ceredigion - with the exception of Powys, Ceredigion has the lowest population density of all local authority areas in Wales. Data from the Department for Business, Energy and industrial Strategy for 2018 (Figure 67)⁴⁰ shows that the average annual domestic electricity bill is £692 for

the South Wales region, again one of the highest rates across the UK and £20 per annum more expensive than the UK average.

Figure 67: Average annual domestic electricity bills 2018 - UK regions



Fuel Poverty

This is significant because in Wales there are an estimated 155,000 households that are fuel poor, which equates to about 12% of all households⁴¹. Results at local authority level are not available for the 2018 data, but we do know from a 2015 Inquiry into Fuel Poverty in Wales by the National Assembly that 24.9% of Ceredigion’s households were considered to be fuel poor, which is the equivalent of 7,643 homes⁴². A household experiences fuel poverty if it spends more than 10 per cent of its income on fuel use to maintain a satisfactory level of heating.

The South Wales distribution area includes a number of very sparsely populated areas such as the mountainous areas in mid Wales, which increases distribution costs. Rural households often use fuels other than gas to heat their homes as they are more likely to be off the gas mains network. These fuels, such as liquefied petroleum gas (LPG) or heating oil significantly increases the cost of heating homes - heating oil costs, for example, are particularly affected by crude oil prices.

The Third Sector

Defining the “Third Sector”

The ‘Third Sector’ is an umbrella term that covers a range of different organisations with different structures and purposes, belonging neither to the public sector nor to the private sector. Third sector organisations include charities, voluntary and community organisations, social enterprises and cooperatives, think tanks and private research institutes, although it does not include universities and colleges. Some organisations, such as housing associations, have been spun off from government and are considered quasi-third sector groups, even though they deliver public services.

The Value of the Third Sector in Wales

The Wales Council for Voluntary Action estimates that 83 hours are spent volunteering per year, per volunteer in Wales. That would equate to around 61 million hours of volunteering time in total, with a value of around £757 million. Although these estimates are based on the last UK Time Use Survey from 2015, they do provide a glimpse of the extent of volunteering in Wales.

Figure 68: Value of the Third Sector in Wales

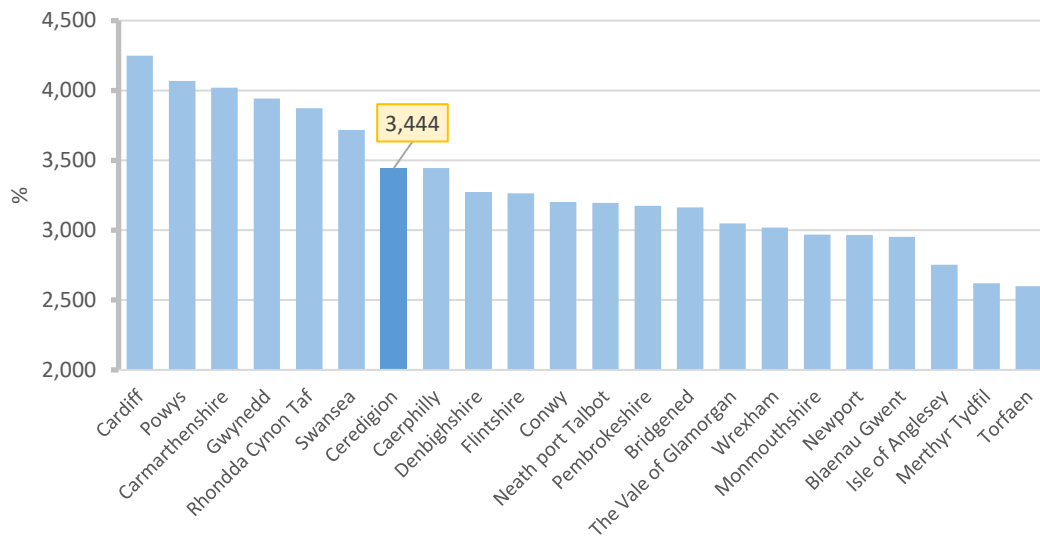


This is set against a backdrop of reduced grant funding from Welsh Government, which decreased from £350 million in 2010/11 to £278 million in 2017/18, and which equates to a 21% reduction. Despite this, the charity and voluntary sector in Wales accounts for just over 8% of employment in Wales, with about 100,000 people employed by charity/voluntary organisations.

The Third Sector in Ceredigion

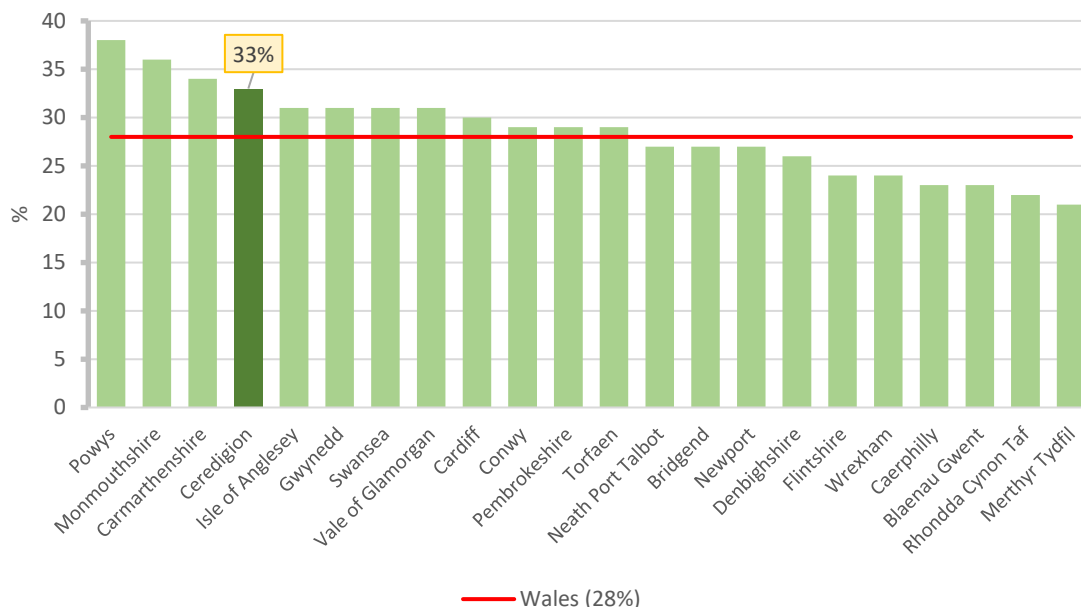
In Ceredigion, there are 3,444 active third sector organisations (Figure 69), above the national average of 3,330. The number of third sector organisations in any area varies depending on a variety of issues, including rurality, poverty, social capital, demand and the structure of the sector in the local area. The third sector in many counties is well-organised, and Ceredigion is no exception. For example, the Ceredigion Association of Voluntary Organisations (CAVO) exists to promote and support voluntary community action throughout the county, assisting individuals and groups in becoming part of the sector, supporting projects and helping to find volunteers.

Figure 69: Number of third sector organisations active in Wales



Volunteering is also very popular in Ceredigion - the proportion of residents (aged 16+) who volunteer in the county is 33% or about 24,500 people. This is much higher than the national average of 28%. This is based on the latest Future Generations Act Indicator 28 results from 2016/17 (Figure 70). For clarity, the indicator defines “volunteering” as adults who give their time for free to help clubs or organisations, but does not include those who provide care for someone⁴³.

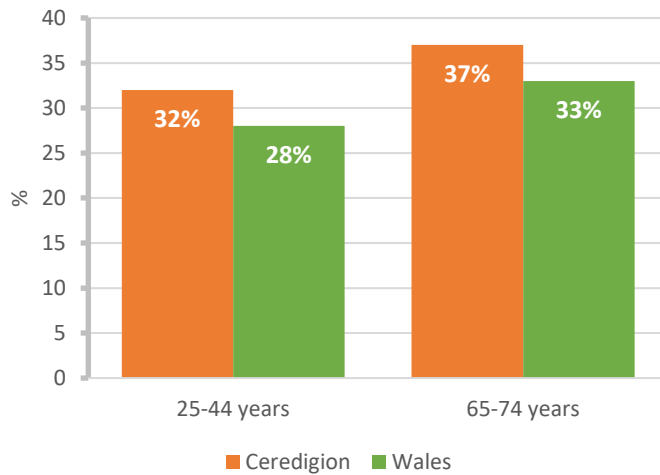
Figure 70: Percentage of people who volunteer 2016/17 (FG Indicator 28)



Broadly speaking, volunteering rates tend to be higher in rural areas, and so it is perhaps not surprising that both Powys and Carmarthenshire also have a high proportion of residents who volunteer. Furthermore, older age groups are also more likely to volunteer – for example in Ceredigion 32% of 24-44 year olds volunteer, but this figure rises to 37% amongst the 65-74 year

age group (Figure 71). These findings suggest that volunteering has many wellbeing benefits such as helping to reduce social isolation amongst the older age groups and those in more rural communities, and that the social value of volunteering is equally as important as the economic impact.

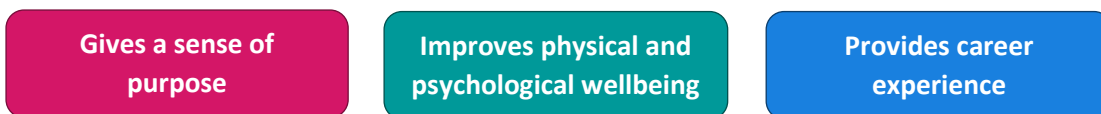
Figure 71: Percentage of people who volunteer 2016/17 by age group (FG Indicator 28)



The Health Benefits of Volunteering

Indeed, the health benefits of volunteering, both physical and psychological, are widely acknowledged. In its *Third Sector Annual Report* Welsh Government recognised that “volunteers often get as much out of the experience as the individuals and communities they help”⁴⁴. Ultimately volunteering is about helping others and having an impact on one’s wellbeing. Three of the common benefits of volunteering are shown in Figure 72.

Figure 72: Common health benefits of volunteering



Charities

Charities are also very active in the county – of the 8,157 registered charities in Wales, 327 are registered in Ceredigion. Per 1,000 population the number of registered charities in the county is 4.48 and the third highest across Wales, behind Powys (6.00) and Gwynedd (4.61), see Figure 73.

Figure 73: All charities registered in Wales - rate per 1,000 population

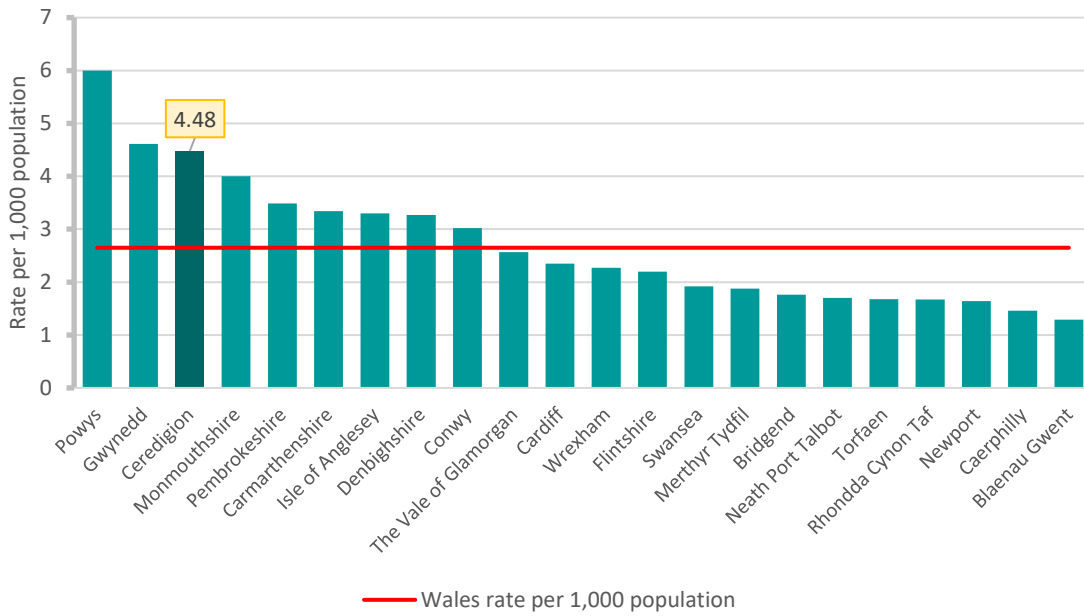
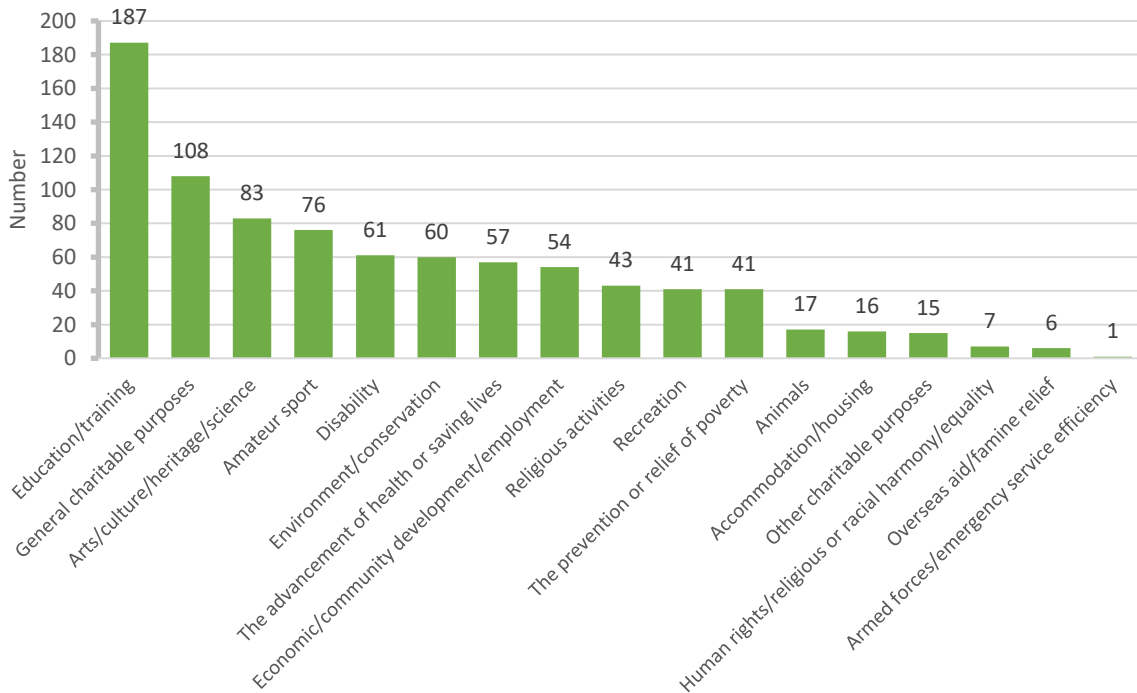


Figure 74 shows a breakdown of the charities operating in Ceredigion by purpose. It shows that over a fifth (21%) of all charities operating in the county relate to *education and training*, followed by *general charitable purposes* (12%), *arts/culture/heritage/science* (10%) and *amateur sport* (9%). These trends are mirrored across the Mid and South West Wales region and across Wales as a whole.

Figure 74: Number of charities operating in Ceredigion by purpose



Looking Ahead

The future challenges for the Third Sector can be difficult to mitigate, partly because some are reliant on future funding through grants or other sources, and partly because the role of many charity and volunteer organisations is to support others facing an immediate crisis rather than longer term support. However, it's clear that going forward there will be big changes that will impact the third sector and the individuals and communities that it supports. Some of the more visible and high profile of these are shown in Figure 75. The Wales Council for Voluntary Action provides a detailed discussion of the challenges facing the third sector in Wales⁴⁵.

Given the role that the third sector plays in the local and national economy, the development of a new economic strategy for the county needs to take account of the role that the sector plays in the provision of services and support for residents, and also the direct role it plays in the local economy through those employed and volunteering in the sector.

Figure 75: Future challenges for the Third Sector in Wales



Endnotes

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- ¹ "Regional gross domestic product local authorities". Online: <https://www.ons.gov.uk/economy/grossdomesticproductgdp/datasets/regionalgrossdomesticproductlocalauthorities>. ONS: London, December 2019.
- ² Mid and South West Wales is defined as Ceredigion, Carmarthenshire, Pembrokeshire, Powys and Swansea.
- ³ CACI Paycheck 2019.
- ⁴ "Labour Market Profile Ceredigion". NOMIS. Online: <https://www.nomisweb.co.uk/reports/lmp/la/1946157390/report.aspx#supply>. Retrieved: 22-1-20.
- ⁵ Neil Ward, 'England Should Embrace its Rural Economy', Financial Times, 5 June 2008.
- ⁶ "Lampeter: Students and town fear for campus' future". BBC. Online: <https://www.bbc.co.uk/news/uk-wales-48747118>. Retrieved: 21-1-20.
- ⁷ "Student Money Survey 2019". Save the Student. Online: <https://www.savethestudent.org/money/student-money-survey-2019.html>. Retrieved: 05/01/2020.
- ⁸ Aberystwyth University estimates the living costs to be between £660 per month in the private sector to £682 per month in University residences. "Typical costs of living in Aber". Online: <https://www.aber.ac.uk/en/student-support/prospective-students/typical-costs/> Retrieved 05/01/2020.
- ⁹ "E-commerce and ICT activity, UK: 2018". Online: <https://www.ons.gov.uk/businessindustryandtrade/itandinternetindustry/bulletins/ecommerceandictactivity/2018>. Retrieved: 17-1-20.
- ¹⁰ "E-commerce and ICT activity, UK: 2018". Online: <https://www.ons.gov.uk/businessindustryandtrade/itandinternetindustry/bulletins/ecommerceandictactivity/2018>. Retrieved: 17-1-20.
- ¹¹ "Wales: Our National Network". Tech Nation Report 2019. Online: <https://technation.io/about-us/national-network/wales/>. Retrieved; 27-1-20.
- ¹² <https://www.bbc.co.uk/news/uk-wales-37010376>
- ¹³ Pantelis Koutroumpis. The economic impact of broadband: evidence from OECD countries April 2018 https://www.ofcom.org.uk/__data/assets/pdf_file/0025/113299/economic-broadband-oecd-countries.pdf
- ¹⁴ "Connected Nations 2018 Wales report". Ofcom. Online: https://www.ofcom.org.uk/__data/assets/pdf_file/0016/130822/Connected-Nations-2018-Wales.pdf
- ¹⁵ "Broadband availability". Ofcom. Online: <https://checker.ofcom.org.uk/broadband-coverage>. Retrieved: 20-1-20.
- ¹⁶ "Connected Nations 2019 Wales report". Ofcom. Online: <https://www.ofcom.org.uk/research-and-data/multi-sector-research/infrastructure-research/connected-nations-2019/nations-supplements>. Retrieved: 17-1-2020.
- ¹⁷ "Ceredigion Assessment of Local Well-being". Ceredigion Public Services Board. Aberaeron: 2017. 60.
- ¹⁸ <https://www.ons.gov.uk/peoplepopulationandcommunity/housing/datasets/meanpricepaidbylowerlayersuperooutputareahpssadataset47>
- ¹⁹ <https://www.bbc.co.uk/news/uk-wales-mid-wales-39859608>
- ²⁰ <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datasets/placeofworkbylocalauthorityshetable7>
- ²¹ Source: home.co.uk. Retrieved: 24-1-20.
- ²² Source: home.co.uk. Retrieved: 24-1-20.
- ²³ Source: home.co.uk. Welsh Government, 2018. Retrieved: 24-1-20.
- ²⁴ Ceredigion's Local Housing Strategy "Housing For All" can be found at: <https://www.ceredigion.gov.uk/resident/housing/housing-strategy/>
- ²⁵ Source: CACI Paycheck 2019.

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- ²⁶ "Prosperity For All; The National Strategy". Welsh Government 2017. 2. Online: <https://gov.wales/sites/default/files/publications/2017-10/prosperity-for-all-the-national-strategy.pdf>. Retrieved: 21-1-20
- ²⁷ "Ceredigion Assessment of Local Wellbeing". Ceredigion Public Services Board. Aberaeron, 2017. 6.
- ²⁸ "Headline estimates of personal well-being from the Annual Population Survey (APS): by counties, local and unitary authorities, year ending March 2012 to year ending March 2019". ONS. Online. Retrieved: 6-3-20.
- ²⁹ National Survey for Wales Results Viewer. Online: <https://gov.wales/national-survey-wales-results-viewer>. Retrieved: 6-3-20.
- ³⁰ Online: <http://www.euro.who.int/en/health-topics/environment-and-health/pages/news/news/2016/11/who-report-shows-urban-green-spaces-deliver-multiple-health-benefits>. Retrieved: 13-2-20.
- ³¹ National Survey for Wales 2018/19. Online: <https://gov.wales/national-survey-wales-april-2018-march-2019>. Retrieved: 12-2-20.
- ³² National Survey for Wales 2018/19. Online: <https://gov.wales/national-survey-wales-april-2018-march-2019>. Retrieved: 12-2-20.
- ³³ Our Planet Matters: Climate change explained. Online: <https://www.bbc.co.uk/news/science-environment-24021772>. Retrieved: 14-2-20.
- ³⁴ Our Planet Matters: Climate change explained. Online: <https://www.bbc.co.uk/news/science-environment-24021772>. Retrieved: 14-2-20.
- ³⁵ National Survey for Wales 2018/19. Online: <https://gov.wales/national-survey-wales-april-2018-march-2019>. Retrieved: 12-2-20.
- ³⁶ The map image shows a representation of the Welsh Index of Multiple Deprivation 2019 at LSOA level. Crown Copyright and database right 2019. Ordnance Survey 100017916.
- ³⁷ "Gross Value Added by Welsh NUTS3 areas and industry". StatsWales. Online: <https://statswales.gov.wales/Catalogue/Business-Economy-and-Labour-Market/Regional-Accounts/Gross-Value-Added-GDP/gross-value-added-gdp-gva-by-welshnuts3areas-industry>. Retrieved: 27-1-20
- ³⁸ "Energy in the UK". Energy UK. Online: <https://www.energy-uk.org.uk/energy-industry/energy-in-the-uk.html>. Retrieved: 22-1-20
- ³⁹ "Energy in the UK". Energy UK. Online: <https://www.energy-uk.org.uk/energy-industry/energy-in-the-uk.html>. Retrieved: 22-1-20. 19.
- ⁴⁰ Average annual domestic electricity bills for UK regions (QEP 2.2.3). Online: <https://www.gov.uk/government/statistical-data-sets/annual-domestic-energy-price-statistics>. Retrieved; 27-1-20.
- ⁴¹ "Fuel Poverty Estimates for Wales: 2018". ONS. Online: <https://gov.wales/fuel-poverty-estimates-wales-2018>. Retrieved: 27-1-20.
- ⁴² "Inquiry into Fuel Poverty". Climate Change, Environment and Rural Affairs Committee. National Assembly for Wales. Online: <http://www.senedd.assembly.wales/documents/s95760/FP%2009%20Ceredigion%20County%20Council.html?CT=2>. Retrieved: 27-1-20.
- ⁴³ Indicator – Recreation – Percentage of people who volunteer (FG Indicator 28). Statswales. Online: <https://statswales.gov.wales>. Retrieved: 4-2-20.
- ⁴⁴ "Third sector scheme Wales: Annual Report 2017/18". Welsh Government. 2019. 28.
- ⁴⁵ "Shape your future – future trends: Implications for the third sector in Wales". Wales Council for Voluntary Action. 2016.