

# Statistical Bulletin





# Workplace employment by industry in Wales, 2001 to 2016

29 Nov 2017 SB 66/2017

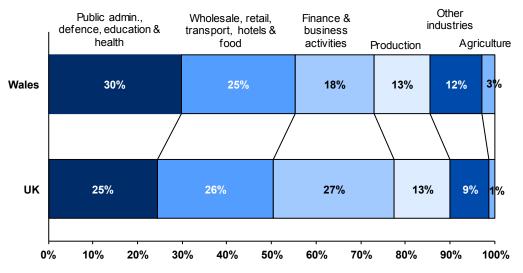
# **Key points**

- In 2016 workplace employment in Wales was 1.404 million. This is the highest level since the series began.
- Between 2015 and 2016 total workplace employment in Wales increased by 1 thousand (percentage unchanged). The corresponding UK figure increased by 1 per cent (<u>Table 1</u>).

## Chart 1 below shows that compared to the UK:

- Employment in Wales was proportionately higher in the public administration, defence, education & health sector (which is not the same as the public sector); the production sector; and the agriculture, forestry & fishing sector.
- The proportion of employment was equal in the other industries sector
- Employment in Wales was proportionately lower in the wholesale, retail, transport, hotels & food sector and the finance & business activities sector.

# Chart 1: Share of workplace employment by industry, Wales and the UK, 2016



## About this bulletin

This statistical bulletin uses a range of data sources to estimate workplace employment, or total jobs, which are a count of jobs in the workplace location. The data in this bulletin are measured on a workplace basis by industry sector for UK, Wales and local areas within Wales up to the year ending December 2016.

## In this bulletin

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Statistician: Craiger Solomons ~ 0300 025 6960 ~ economic.stats@gov.wales

Enquiries from the press: 0300 025 8099 Public enquiries: 0300 025 5050 Twitter: @statisticswales

## Introduction

This statistical bulletin shows the distribution and trends of workplace employment by industry in the UK, Wales, and areas within Wales between 2001 and 2016. It shows the impact of the recession across the UK during 2008 and 2009 and the subsequent recovery up to the end of 2016.

These were the only official estimates of total employment by industry in Wales, i.e. including employees and the self-employed, until July 2010 when the ONS released improved workforce jobs estimates. These improved estimates include workforce jobs by industry (rather than employee jobs by industry). A comparison between this Welsh Government workplace employment publication and ONS' workforce jobs series is given in the 'Key quality information: coherence with other sources' section on page 19.

This bulletin remains the only official source of workplace employment by industry and local authority in Wales.

Throughout the bulletin the symbol "-" indicates that the figure is between 0 and 500 (or 0 and - 500). This is used to differentiate between a low number and a true zero as figures are rounded to the nearest 1,000.

The industrial sectors 'Public administration, education & health' overlap, but should **not** be regarded as identical to the public sector. This is because these industry sectors include private sector education and health (and social services) and don't include public sector activity in other industrial sectors (e.g. finance). The official estimates of public sector employment can be found on the ONS website.

### Methodology and sources

Reference should be made to the key quality information section when interpreting these estimates which starts on page 21 and includes:

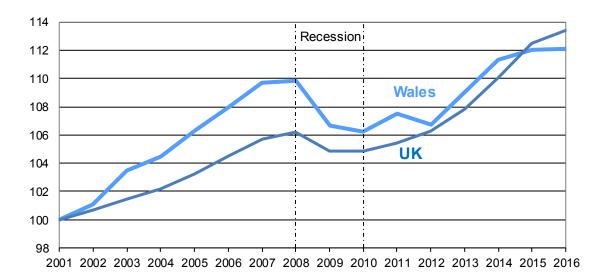
- Details of the differences between the UK estimates presented here and ONS workforce jobs estimates
- Details of the methodology used in deriving these estimates
- A description of the differences in these estimates and other estimates of employment and workforce jobs.
- Details of the coverage of these estimates

These workplace employment estimates are derived using data from the following three sources:

- Employee jobs data, together with self-employed jobs and government supported trainees data from the Annual Population Survey (APS);
- Business Register and Employment Survey (BRES);
- Survey of Agriculture and Horticulture.

# Section 1: Workplace employment for Wales and the UK

Chart 2: Workplace employment between 2001 and 2016, Wales and the UK<sup>1,(r)</sup> (2001=100)



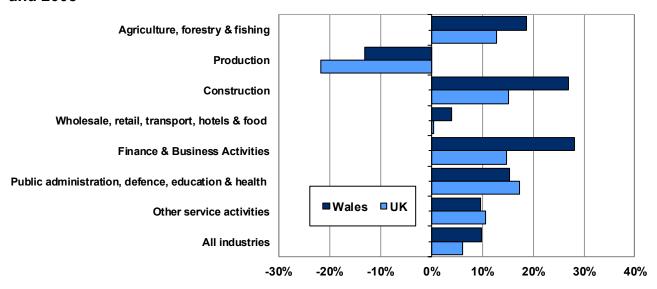
<sup>1.</sup> See key quality information for details of the differences between the UK estimates presented here and ONS workforce jobs estimates. Also see <u>key quality information</u> for details of the methodology used in deriving these estimates and details of the coverage of these estimates.

(r) 2012-2015 data has been revised since the previous publication following a reweighting of the APS.

- Between 2001 and 2008, Wales saw greater growth in workplace employment compared to the UK, growing by 10 per cent over the seven years compared with 6 per cent for the UK.
- With the onset of recession between 2008 and 2010, Wales saw greater falls relative to the UK; falling 4 per cent over the two years compared with 1 per cent for the UK.
- Between 2010 and 2016 Wales saw slightly less growth relative to the UK, growing by 6 per cent over the six years compared with 9 per cent for the UK.

Chart 2 above shows that the changes in workplace employment fell into three distinct periods: an overall growth in jobs between 2001 and 2008; recession and a fall in jobs between 2008 and 2010; then a period of recovery from 2010 onwards. Each period was associated with a different pattern of changes in workplace employment by broad industry sector. These patterns over the three periods are shown in Charts 3 to 5.

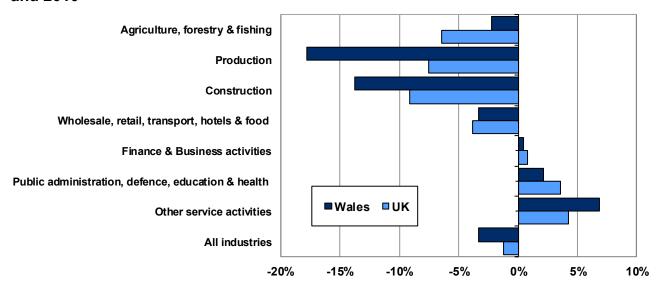
Chart 3: Percentage change in workplace employment by industry between 2001 and 2008



#### Between 2001 and 2008:

- In both Wales and the UK there were increases in employment in 6 of the 7 industry sectors with a fall in the remaining sector (*production*) which fell by 13 per cent in Wales and by 22 per cent in the UK.
- The *finance & business activities* sector had the largest percentage increase in employment in Wales (up 28 per cent), followed by the *construction* sector (up 27 per cent). These 2 industry sectors also grew in the UK, both up 15 per cent. The *public administration*, *defence*, *education & health sector* (which is *not* the same as the public sector) had the largest percentage increase (17 per cent) in the UK.
- Of the 6 sectors showing an increase in employment, 68 per cent of the increase in Wales and 79 per cent of the increase in the UK was accounted for by the *public administration*, *defence*, *education* & *health* and the *finance* & *business activities* sectors.

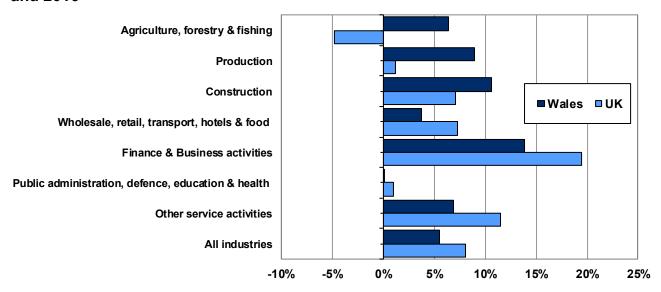
Chart 4: Percentage change in workplace employment by industry between 2008 and 2010



## Between 2008 and 2010:

- In Wales there were falls in employment in 4 of the 7 industry sectors, increases in 2 sectors and there was little change in 1 sector. In the UK, 4 sectors had falls and 3 increased.
- In Wales the *production* sector had the largest fall in employment (down 32 thousand, or 18 per cent) followed by the *construction* sector (down 15 thousand, or 14 per cent) with these 2 sectors accounting for 79 per cent of the total fall. These same 2 sectors accounted for 56 per cent of the fall in the UK.
- Of the 3 sectors employment increased, the other service activities sector had the largest percentage increase in both Wales and the UK (up 7 per cent and up 4 per cent respectively).

Chart 5: Percentage change in workplace employment by industry between 2010 and 2016



## Between 2010 and 2016:

- In Wales there have been increases in employment in 6 of the 7 industry sectors, with one sector unchanged. The only fall in the UK was in the *agriculture, forestry & fishing* sector (down 5 per cent), all the other sectors saw an increase in employment.
- The *finance and business activities* sector had the largest percentage increase in employment in Wales (up 14 per cent) followed by the *construction* sector (up 11 per cent).
- In the UK the largest percentage increases were in the *finance & business activities* sector (up 19 per cent) and the *other service activities* sector (up 12 per cent).

Table 1: Workplace employment by industry for Wales and the UK<sup>1,2,(r)</sup>

Numbers in thousands Change in latest Percentage change levels since: in latest since: Area and industry 2001 2015 2016 2001 2015 2001 2015 Wales: 33 41 41 8 24% Agriculture, forestry & fishing 1 -25% 30% Mining & quarrying 3 2 2 -1 Manufacturing 193 147 142 -50 -5 -26% -3% Electricity, gas, steam & air conditioning 5 10 8 3 -3 51% -24% Water supply; sewerage, waste 8 10 2 -2 27% management & remediation activities 13 -19% 85 93 103 18 Construction 11 21% 11% Wholesale & retail trade; repair of motor -5% vehicles & motorcycles 210 207 199 -11 -8 -4% Transportation & storage 51 41 -7 -9 -15% -18% 49 Accommodation & food service activities 100 33 84 117 17 40% 17% Information & communication 25 24 35 10 11 39% 44% Financial & insurance activities 26 31 31 5 18% 1% 12 19 23 11 4 95% 20% Real estate activities Professional, scientific & technical activities 78 27 -8 43 70 62% -11% Administrative & support service activities 64 88 90 27 2 42% 3% Public administration & defence; compulsory social security 74 86 83 9 -2 12% -3% Education 114 132 131 16 -2 14% -1% Human health & social work activities 167 205 205 38 23% -3 Arts, entertainment & recreation 30 44 41 12 40% -7% 33 3 -1 10% Other industries 29 31 -4% 1,403 All industries 1,253 152 1 12% 1,404 **United Kingdom:** Agriculture, forestry & fishing 388 403 390 2 -13 1% -3% Mining & quarrying 72 67 63 -8 -4 -11% -6% Manufacturing 3,519 2.454 2,439 -1.080-15 -31% -1% 20% Electricity, gas, steam & air conditioning 109 127 22 4 4% 131 Water supply; sewerage, waste 2% 187 management & remediation activities 153 191 38 4 25% Construction 1,955 2,159 235 31 12% 1% 2,190 Wholesale & retail trade; repair of motor 4,637 vehicles & motorcycles -353 -7.2% -1% 4,925 4,572 -65 Transportation & storage 1,406 1,535 1,628 222 92.4 16% 6% Accommodation & food service activities 1,756 2,115 2,190 434 75.3 25% 4% Information & communication 1,173 1,361 1,392 219 31.5 19% 2% Financial & insurance activities 1,056 46 4% 2% 1,025 1,072 16.0 Real estate activities 418 553 533 115 -19.6 28% -4% Professional, scientific & technical activities 1,713 2,912 3,004 1,291 92.5 75% 3% Administrative & support service activities 2,027 2,768 2,787 760 19 37% 1% Public administration & defence;

Source: Annual Population Survey, Business Register and Employment Survey and Survey of Agriculture and Horticulture

32,145

1,239

2.757

3,946

941

927

1,232

2.755

3,971

961

911

32,413

-104

538

209

207

3,833

1,039

-7

-3

25

20

-17

267

-8%

24%

35%

28%

29%

13%

-1%

1%

2%

-2%

1%

1,336

2,217

2,932

752

704

28,580

compulsory social security

Human health & social work activities

Arts, entertainment & recreation

Education

Other industries

All industries

<sup>1.</sup> See <u>key quality information</u> for details of the differences between the UK estimates presented here and ONS workforce jobs estimates. Also see key quality information for details of the methodology used in deriving these estimates and details of the coverage of these estimates. The full series can be found on <u>StatsWales</u>.

<sup>2.</sup> Data on levels is rounded to the nearest thousand; changes are based on unrounded data, then rounded to the nearest thousand, so may not sum.

<sup>(</sup>r) 2012-2015 data has been revised since the previous publication.

#### Table 1 shows that:

### Between 2001 and 2016:

- Workplace employment in Wales increased by 12 per cent, with 15 of the 19 industry sectors increasing and 4 industry sectors falling. Workplace employment in the UK increased by 13 per cent, with increases in 15 of the 19 industry sectors and falls in 4 industry sectors. Of the 4 industry sectors which fell in Wales, 3 also fell in the UK.
- In Wales, the *human health & social work activities* sector had the largest absolute increase (up 38 thousand, or 23 per cent) followed by the *accommodation & food services activities* sector (up 33 thousand, or 40 per cent) and the *professional, scientific & technical activities* sector (up 27 thousand or 62 per cent). The largest absolute falls were in the *manufacturing* sector (down 50 thousand or 26 per cent) and the *wholesale & retail trade; repair of motor vehicles & motorcycles* sector (down 11 thousand or 5 per cent).
- In the UK the *professional, scientific & technical activities* sector had the largest absolute increase (up 1,291 thousand or 92 per cent) followed by *human health and social work activities* sector (up 1,039 thousand or 35 per cent). The largest absolute fall was in the *manufacturing* sector (down 1,080 thousand or 31 per cent).
- The largest percentage difference between Wales and the UK was in the *real estate* activities sector which increased by 95 per cent in Wales compared to a 28 per cent increase in the UK.

#### Between 2015 and 2016:

- Workplace employment in Wales increased by 1 thousand, with increases in 7 of the 19 industry sectors, decreases in 10 sectors while 2 sectors had little change. In the UK workplace employment increased by 267 thousand or 1 per cent, with increases in 11 of the 19 industry sectors, decreases in 7 sectors, while 1 sector had little change.
- The largest absolute increase in the number of jobs in Wales was in the accommodation & food services sector (up 17,000, or 17 per cent) followed by the construction sector (up 11,000, or 11 per cent). The transportation & storage sector had the largest absolute fall, down 9,000 or 18 per cent, followed by the professional, scientific and technical activities sector which fell by 8,000 or 11 per cent.
- The *professional, scientific & technical activities* sector had the largest absolute increase in the number of jobs in the UK (up 92,000, or 3 per cent) followed by the *transportation and storage* sector (up 92,000, or 6 per cent). The sector with the largest absolute fall across the UK was the *wholesale & retail trade; repair of motor vehicles & motorcycles* sector, down 65,000 or 1 per cent.
- Please note that the year on year changes are highly volatile in some industry sectors due to low sample sizes.

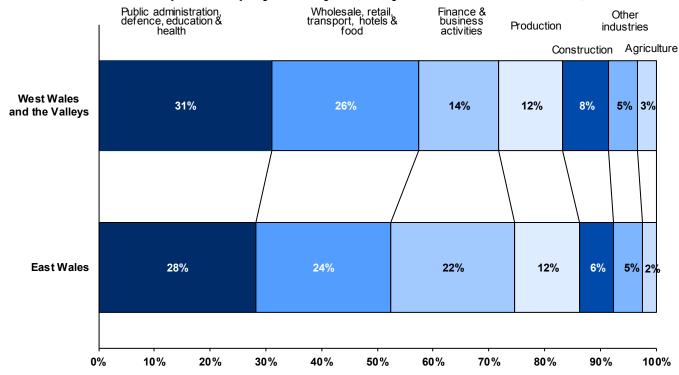
## In 2016:

- In Wales the *human health & social work activities* sector was the largest industry sector in terms of workplace employment in 2016, while the *wholesale & retail trade; repair of motor vehicles & motorcycles* sector was the largest in 2015. The *wholesale & retail trade; repair of motor vehicles & motorcycles* sector was largest sector in Wales between 2001 and 2010, but fell behind the *human health & social work activities* sector (which includes the private sector) between 2011 and 2014.
- The wholesale & retail trade; repair of motor vehicles & motorcycles sector was the second largest sector in Wales followed by the manufacturing sector, the education sector and the accommodation & food service activities sector. These top 5 industry sectors accounted for over half of the total jobs in Wales (57 per cent).
- In the UK the wholesale & retail trade; repair of motor vehicles & motorcycles sector remains the largest sector followed by the human health & social work activities sector, the professional, scientific & technical activities sector, the administrative & support service activities sector and the education sector. These top 5 industry sectors accounted for over half of the total jobs in the UK (53 per cent).

# Section 2: Workplace employment for Welsh NUTS2 areas

Chart 6 below shows the shares of workplace employment by industry groupings for the two NUTS2 areas of Wales.

Chart 6: Share of workplace employment by industry for Welsh NUTS2 areas, 2016<sup>a</sup>



a. See <u>key quality information</u> for the definition of the NUTS2 areas in Wales. Also see key quality information for details of the methodology used in deriving these estimates and for details of the coverage of these estimates.

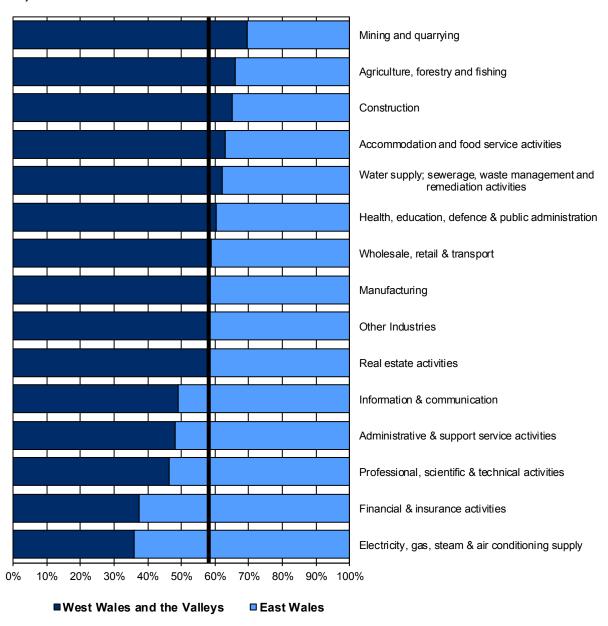
- In 2016, West Wales and the Valleys had a larger share of jobs in 4 of the 7 industry groupings, the *public administration, defence, education, & health* sector (which is *not* the same as the public sector); the *wholesale, retail, transport, hotels & food* sector; the *construction* sector; and the *agriculture, forestry and fishing* sector.
- East Wales had a larger share of jobs in 1 industry grouping, the finance & business activities sector.
- The share was equal in the remaining 2 industry groupings; the production sector and the other industries sector.

An alternative and more detailed analysis of the differences between workplace employment in the different industry sectors and NUTS2 areas of Wales is given in Chart 7 below.

This chart looks at the share of jobs in each sector in 2016, located in the two NUTS2 areas of Wales. The line on the chart represents the share of total Welsh workplace employment in West Wales and the Valleys (58 per cent) and so reflects the all-industries average. Shares in excess of this line indicate industries that are more represented in West Wales and the Valleys than East Wales, and vice versa.

The chart shows significant variation by industry, ranging from 70 per cent of jobs in the *mining & quarrying* sector being located in West Wales and the Valleys, compared with just 36 per cent of jobs in the *electricity, gas, steam & air conditioning supply* sector.

Chart 7: Share of workplace employment by Welsh NUTS2 areas and industry sector, 2016<sup>a</sup>



a. See key quality information for the definition of the NUTS2 areas in Wales. Also see key quality information for details of the methodology used in deriving these estimates and for details of the coverage of these estimates.

Table 2: Workplace employment by industry and Welsh NUTS2 areas 1,2,(r)

Numbers in thousands Change in latest Percentage change in levels over: latest over: Area and industry 2001 2015 2016 2001 2015 2001 2015 West Wales and the Valleys: Agriculture, forestry & fishing 22 25 27 5 2 24% 8% Mining & quarrying 2 1 2 -18% 10% -27% Manufacturing 114 87 83 -31 -4 -4% Electricity, gas, steam & air conditioning supply 2 4 3 1 -2 54% -36% Water supply; sew erage, w aste management & remediation activities 5 8 6 2 -2 35% -23% Construction 53 61 67 15 6 28% 10% Wholesale & retail trade; repair of motor vehicles & motorcycles 128 122 117 -11 -4 -8% -4% Transportation & storage 27 29 24 -3 -5 -10% -17% Accommodation & food service activities 53 63 74 21 11 38% 17% Information & communication 11 12 17 6 5 56% 45% Financial & insurance activities 10 12 12 2 16% Real estate activities 6 11 13 7 3 114% 24% 22 Professional, scientific & technical activities 38 32 10 44% -6 -15% Administrative & support service activities 33 41 43 11 3 32% 7% Public administration & defence; compulsory social 45 51 49 4 -2 10% -3% 82 81 10 Education 71 -1 15% -1% Human health & social w ork activities 99 125 123 -2 24% 24 -1% 17 24 24 7 40% Arts, entertainment & recreation 16 19 18 -2 -9% Other industries 1 9% All industries 736 816 80 815 11% East Wales: 3 Agriculture, forestry & fishing 11 16 14 -2 23% -12% Mining & quarrying 1 -37% 117% 1 -19 Manufacturing 79 60 59 -1 -25% -2% Electricity, gas, steam & air conditioning supply 3 6 5 2 -1 50% -15% Water supply; sew erage, w aste management & remediation activities 3 4 1 15% -11% Construction 32 31 36 3 4 11% 14% Wholesale & retail trade; repair of motor vehicles & 82 85 81 -4 -1% -4% motorcycles Transportation & storage 22 22 17 -5 -4 -21% -19% Accommodation & food service activities 31 37 43 13 6 42% 17% Information & communication 14 12 18 4 5 26% 43% Financial & insurance activities 16 19 19 3 19% 1% 6 8 10 4 1 74% 15% Real estate activities 17 21 40 Professional, scientific & technical activities 38 -3 83% -6% Administrative & support service activities 31 47 47 16 52% -1% Public administration & defence; compulsory social security 29 35 34 5 -1 16% -2% Education 44 50 50 6 -1 14% -1% Human health & social w ork activities 67 80 82 14 2 21% 2% Arts, entertainment & recreation 12 20 17 5 -3 39% -16% Other industries 12 13 14 1 12% 2% All industries 517 588 588 71 14%

Source: Annual Population Survey, Business Register and Employment Survey and Survey of Agriculture and Horticulture

<sup>1.</sup> See key quality information for the definition of the NUTS2 areas in Wales. Also see key quality information for details of the methodology used in deriving these estimates and for details of the coverage of these estimates. The full series can be found on StatsWales.

<sup>2.</sup> Data on levels is rounded to the nearest thousand; changes are based on unrounded data, then rounded to the nearest thousand, so may not sum.

<sup>(</sup>r) 2012-2015 data has been revised since the previous publication.

### Between 2001 and 2016:

- Both of the Welsh NUTS2 areas had increases in workplace employment with West Wales and the Valleys having a larger absolute increase, up 80 thousand (11 per cent) compared to a 71 thousand increase (14 per cent) for East Wales
- West Wales and the Valleys had increases in workplace employment in 15 of the 19 industry sectors, with the remaining 4 sectors having falls. East Wales had increases in 15 of the 19 industry sectors and falls in 4 industry sectors.
- In West Wales and the Valleys the human health & social work activities sector had the
  largest absolute increase (up 24,000, or 24 per cent) followed by the accommodation &
  food services sector (up 21 thousand or 38 per cent) and the construction sector (up 15
  thousand or 28 per cent).
- In East Wales the *professional, scientific & technical activities* sector had the largest absolute increase (up 17,000, or 83 per cent) followed by the *administrative & support service activities* sector (up 16,000, or 52 per cent) and the *human health & social work activities* sector (up 14,000 or 21 per cent).
- The *manufacturing* sector had the largest fall in both of the Welsh NUTS 2 areas, falling by 31 thousand (or 27 per cent) in West Wales and the Valleys and down 19 thousand (or 25 per cent) in East Wales.
- When looking at the percentage differences in the changes over this period, in West Wales
  and the Valleys workplace employment in *real estate activities* increased by the largest
  amount (114 per cent).
- In East Wales the largest percentage increase in workplace employment was in *professional, scientific & technical activities*, with a 83 per cent increase.

### Between 2015 and 2016:

- Workplace employment increased by 1,000 in West Wales and the Valleys, whilst there
  was little change in East Wales.
- Workplace employment increased in 7 of the 19 industry sectors in West Wales, 10 sectors had falls and 2 sectors were unchanged.
- In East Wales, 8 of the 19 industry sectors increased and 11 sectors decreased.
- The accommodation & food service activities sector had the largest absolute increase in West Wales and the Valleys (up 11 thousand or 17 per cent) followed by the construction sector (up 6 thousand or 10 per cent). The largest absolute fall was in the professional, scientific & technical activities sector (down 6 thousand or 15 per cent).
- In East Wales the largest absolute increase was also in the accommodation and food service activities sector (up 6 thousand or 17 per cent) followed by the information and communication sector (up 5 thousand or 43 per cent). The largest absolute fall was in the transportation & storage sector (down 4 thousand or 19 per cent).

- In West Wales and the Valleys, 6 of the 19 industry sectors had increases both over 2001 and over 2015. Of the remaining 13 industry sectors, 3 sectors had falls both over 2001 and over 2015.
- East Wales, 7 of the 19 industry sectors had increases both over 2001 and over 2016 (4 of these industry sectors also increasing over both periods in West Wales and the Valleys too). Of the remaining 12 industry sectors, 3 sectors had falls both over 2001 and over 2016.
- Please note that the year on year changes are highly volatile in some industry sectors due to low sample sizes.

# Section 3: Workplace employment for Welsh local authorities

Table 3: Workplace employment by Welsh local authority 1,2,(r)

Numbers in thousands Percentage change Change in latest levels over: in latest over: 2001 Local authority areas 2001 2015 2016 2015 2001 2015 West Wales and the Valleys 736 815 816 80 1 11% Isle of Anglesey 25 26 23 -2 -2 -7% -9% Gwynedd 57 64 64 7 11% 2 6 Conwy 42 45 48 14% 5% 2 Denbighshire 41 43 45 4 10% 4% Ceredigion 36 38 37 1 -1 2% -1% Pembrokeshire 49 56 58 9 2 18% 3% 17 2 25% 2% Carmarthenshire 66 81 83 Swansea 107 120 130 23 11 21% 9% Neath Port Talbot -2% 43 51 50 7 -1 15% Bridgend 56 64 60 4 -4 7% -6% Rhondda Cynon Taf 76 84 76 -8 1% -9% 2 Merthyr Tydfil 22 25 24 -1 11% -4% Caerphilly 56 58 61 5 3 9% 4% Blaenau Gwent 23 21 19 -4 -2 -17% -10% Torfaen 35 38 37 2 -1 5% -3% East Wales 517 588 588 71 14% Flintshire 56 60 55 -1 -5 -1% -8% Wrexham 64 74 71 7 -3 10% -5% -3 **Powys** 56 64 61 5 9% -5% Vale of Glamorgan 41 44 42 1 -2 4% -5% Cardiff 183 225 236 53 11 29% 5% Monmouthshire 43 46 47 4 2 9% 4% Newport 74 75 76 2 1 3% 1% 286 306 -6 7% -2% North Wales 313 21 Mid Wales 92 102 98 5 -4 6% -4% South West Wales 266 308 321 55 4% 13 21% South East Wales 609 681 679 71 -2 12% Wales 1,253 1,403 1,404 152 1 12% **United Kingdom** 28,580 13% 1% 32,145 32,413 3,833 267

Source: Annual Population Survey, Business Register and Employment Survey and Survey of Agriculture and Horticulture

<sup>1.</sup> See key quality information for details of the differences between the UK estimates presented here and ONS workforce jobs estimates. Also see key quality information for the definition of the NUTS2 areas in Wales, for details of the methodology used in deriving these estimates and for details of the coverage of these estimates. The full series can be found on StatsWales.

<sup>2.</sup> Data on levels is rounded to the nearest thousand; changes are based on unrounded data, then rounded to the nearest thousand, so may not sum.

<sup>(</sup>r) 2012-2015 data has been revised since the previous publication.

#### Between 2001 and 2016:

- Within Wales workplace employment increased in 19 of the 22 Welsh local authorities with Cardiff having the largest absolute increase in jobs (up 53 thousand or 29 per cent) followed by Swansea (up 23 thousand, or 21 per cent) and Carmarthenshire (up 17 thousand, or 25 per cent).
- Blaenau Gwent was the local authority with the largest decrease (down 4,000, or 17 per cent). This was followed by Isle of Anglesey (down 2,000, or 7 per cent) and Flintshire (down 1,000, or 1 per cent).
- All of the 4 economic regions in Wales had increases with South East Wales having the largest absolute increase (up 71 thousand, or 12 per cent) followed by South West Wales (up 55 thousand, or 21 per cent), North Wales (up 21 thousand, or 7 per cent) and Mid Wales (up 5 thousand, or 6 per cent.)

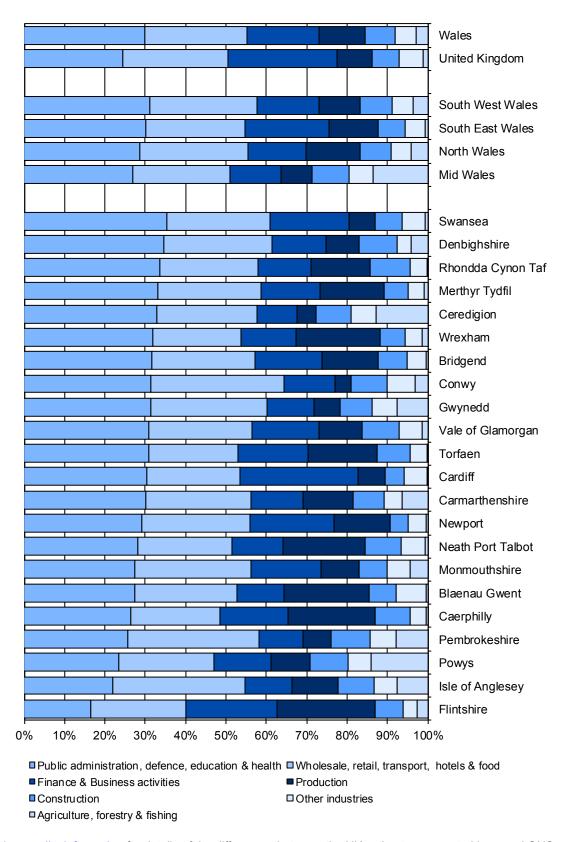
## Between 2015 and 2016:

- Workplace employment increased in 9 of the 22 Welsh local authorities with Cardiff having the largest absolute increase in jobs (up 11 thousand, or 5 per cent), followed by Swansea (up 11 thousand, or 9 per cent).
- Of the remaining local authorities, 12 had falls in workplace employment and 1 was unchanged. Rhonda Cynon Taf and Flintshire had the largest absolute falls, down 8 thousand (9 per cent) and down 5 thousand (8 per cent) respectively.
- Three of the four Welsh economic regions had decreases over the year, with South West
  Wales having the only absolute increase (up 13 thousand, or 4 per cent). North Wales had
  the largest decrease (down 6 thousand, or 2 per cent), followed by Mid Wales (down 4
  thousand or, 4 per cent) and South East Wales (down 2 thousand, per cent unchanged).
- Please note that the year on year changes are highly volatile in some local authorities due to low sample sizes.

There are clear differences in the profile of jobs in the different local authority areas, with higher proportions of jobs in the *agriculture*, *forestry and fishing* sector in the more rural areas, and higher proportions of jobs in the *production*, *construction* and *service* sectors in the more urban areas.

This is shown in <u>Chart 8</u> over the page, which illustrates the shares of workplace employment in each of the 7 broad industry sectors for each of the Welsh local authority areas in 2016. <u>Table 4</u>, which follows Chart 8, gives the numbers of jobs used to produce Chart 8.

Chart 8: Percentage of workplace employment by industry and Welsh local authority, 2016<sup>a, b</sup>



a. See <u>key quality information</u> for details of the differences between the UK estimates presented here and ONS workforce jobs estimates. Also see key quality information for details of the methodology used in deriving these estimates and for details of the coverage of these estimates.

b. Finance & Business activities includes Information & communication, financial & insurance activities, real estate activities, professional, scientific & technical activities and Administrative & support service activities.

Table 4: Workplace employment by industry and Welsh local authority 2016<sup>a</sup>

Numbers in thousands Wholesale, Public retail, Financial Professional, scientific administration, Agriculture, & Real and technical activities; defence. Other transport, hotels & administrative & support AII forestry & Information & insurance estate education & service fishing Local authority area Production Construction food communication activities activities service activities health activities industries West Wales and the Valleys Isle of Anglesey Gw ynedd Conw v Denbighshire Ceredigion Pembrokeshire Carmarthenshire Sw ansea Neath Port Talbot Bridgend Rhondda Cynon Taf Merthyr Tydfil Caerphilly Blaenau Gw ent Torfaen East Wales Flintshire Wrexham Pow ys Vale of Glamorgan Cardiff Monmouthshire New port North Wales Mid Wales South West Wales South East Wales Wales 1,404 **United Kingdom** 2,825 2,190 8,390 1,392 1,072 5,791 7,958 1,871 32,413

Source: Annual Population Survey, Business Register and Employment Survey and Survey of Agriculture and Horticulture

a. See key quality information for details of the differences between the UK estimates presented here and ONS workforce jobs estimates. Also see key quality information for the definition of the NUTS2 areas in Wales, for details of the methodology used in deriving these estimates and for details of the coverage of these estimates.

The full series can be found on StatsWales.

#### In 2016:

- At 35 per cent Swansea and Denbighshire had the highest share of workplace employment in the *public administration, defence, education & health* sector (which is *not* the same as the public sector), followed by Rhonda Cynon Taf (34 per cent). Flintshire had the lowest share (17 per cent). For Wales the share was 30 per cent; the UK share was 25 per cent.
- Conwy, the Isle of Anglesey and Pembrokeshire (33 per cent) had the highest shares of
  workplace employment in the wholesale, retail, transport, hotels & food sector. Whilst
  Torfaen, Caerphilly and Wrexham had the lowest share, all at 22 per cent. For Wales the
  share was 25 per cent; the UK share was 26 per cent.
- Cardiff had the highest share of workplace employment in the finance & business activities sector (29 per cent), followed by Flintshire (22 per cent) and Newport (21 per cent).
   Ceredigion had the lowest share (10 per cent). For Wales the share was 18 per cent; the UK share was 27 per cent.
- Flintshire had the highest share of workplace employment in the *production* sector at 24 per cent followed by Caerphilly (22 per cent). Conwy and Ceredigion had the lowest share (4 and 5 per cent respectively). For Wales the share was 12 per cent; the UK share was 9 per cent.
- Rhondda Cynon Taf, Pembrokeshire and Denbighshire had the highest share of workplace employment in the *construction* sector, all at 10 per cent. Newport and Cardiff had the lowest share (both 5 per cent). For both Wales and the UK, the share was 7 per cent.
- Blaenau Gwent and Conwy had the highest share of workplace employment in the *other* service activities sector at 7 per cent. Flintshire and Denbighshire had the lowest share, both at 3 per cent. For Wales the share was 5 per cent; the UK share was 6 per cent.
- Powys had the highest share of workplace employment in the agriculture, forestry & fishing sector at 14 per cent, followed by Ceredigion at 13 per cent. This is in contrast with Cardiff, Torfaen, Rhonda Cynon Taf, Newport, Caerphilly, Blaenau Gwent and Bridgend which all had a share of 0 per cent. For Wales the share was 3 per cent; the UK share was 1 per cent.

## **Key quality information**

#### Relevance

The main purpose of this bulletin is to provide workplace employment estimates, or estimates of total jobs, for Wales and its sub-regions, disaggregated by broad industry grouping. As well as this, the data in this bulletin also allows estimates of productivity to be produced as the industrial split is consistent with that of the regional accounts.

The Business Register and Employment Survey (BRES – formerly the Annual Business Inquiry (ABI)) conducted by the ONS has long provided the means for disaggregation of *employee* jobs into industry groupings and detailed geographical breakdowns. However, BRES is more suited to cross-sectional analysis than it is for comparisons over time, and it covers employee jobs and working proprietors only.

Like both BRES and the previous bulletins, this bulletin also allows for analysis at a sub-Wales level, down to local authority level. Thus, this bulletin provides estimates of total jobs over time by both industry and local authority in Wales, and therefore represents an improvement over BRES in analysing the labour market from an industrial perspective.

In deriving estimates of workplace employment by industry for Wales and its sub-regions, this bulletin makes use of a number of data sources, predominantly the APS (previously the Local Labour Force Survey or LLFS), and also BRES and the Survey of Agriculture and Horticulture.

The Welsh sub-regional breakdowns of the data given in this bulletin are at NUTS2 and local authority levels. Nomenclature of Units for Territorial Statistics (NUTS) is an EU hierarchical geographic breakdown of member states. NUTS1 defines the regions of UK (of which Wales is one), whilst NUTS4 defines local authorities, with NUTS2 and NUTS3 representing successive hierarchical aggregations of local authorities. Within Wales, there are two NUTS2 areas, namely 'West Wales and the Valleys' and 'East Wales', the former being the area of Wales currently eligible for Convergence funding from the European Union. The local authorities which make-up the two NUTS2 areas in Wales are shown in Tables 3 and 4.

The industry breakdown applied to the data is based on the Standard Industrial Classification (SIC) 2007. As the sub-Wales detail is increased, greater aggregation of the industry detail is performed, to ensure that the data presented are robust. The industry sectors used for Wales data are relatively detailed and self-explanatory, whilst at the local authority level, there are ten broad industry sectors, which cover agriculture, forestry and fishing (section A), production (sections B, C, D and E), construction (section F), wholesale, retail, transport, hotels and food (sections G, H and I), information and communication (section J), financial and insurance activities (section K), real estate activities (section L), professional, scientific and technical activities; administrative and support service activities (sections M and N), public administration, defence, education and health (sections O, P and Q) and other service activities (sections R to U). Industry detail shown for the NUTS2 areas is at the same level of detail as that shown at the Wales level. As noted in SB 70/2011 "Workplace employment by industry in Wales, 2001 to 2009", the back series of data prior to 2008 has been converted to SIC 2007 from SIC 2003.

The UK estimates of workplace employment by industry within this bulletin have been derived in the same way as the estimates for Wales and its sub-regions *purely* to provide a consistent comparator for the Wales estimates of jobs by industry. This means that they differ from the estimates of workforce jobs by industry in the UK and Wales as published by the ONS, which are derived from a different methodology, based mainly on employer sources.

Therefore, the UK estimates should not be used for any purpose other than to provide a comparison with the estimates for Wales presented here. The ONS' estimates of UK workforce jobs can be found in table 5 of the latest ONS UK labour market release.

and should be used in preference to the UK estimates given here unless making comparisons with the estimates for Wales presented here.

The data given in this bulletin are rounded independently to the nearest thousand jobs and so the totals given may not add to the sum of their constituent parts.

## Accuracy

As the APS is a survey of only private households, any jobs held by residents of communal establishments will be excluded. The main impact of this is that HM forces jobs where the job-holders are usually resident on a base or ship will be excluded, although forces jobs where the job-holders live in private households will be included. It is not possible to identify whether HM forces personnel live on bases or ships from the data readily available from the Ministry of Defence.

Although second jobs are covered by the estimates in this bulletin, no account is taken of third and any subsequent jobs that an individual may hold, as no such information is available from the APS.

The estimates of workplace employment jobs published here are generated from a number of sources, so it is difficult to calculate direct measures of the quality of the estimates. However, given that the results are heavily based on the annual APS datasets, which themselves are derived from a sample of approximately 18,000 people of working age across Wales, with a minimum of around 600 people aged 16-64 in most local authorities in Wales, then it is reasonable to conclude that the estimates presented here are fit for purpose in analysing the industrial structure of the workplace employment across Wales and its sub-regions.

The methodology used to derive workplace employment by industry for Wales and its sub-regions (and also the comparable UK estimates) can be listed as a series of distinct steps, as set out below.

- Data for the numbers of first and second employee jobs by Welsh local authority of workplace, and for the UK as a whole, are extracted from the annual LLFS/APS datasets for 2001 onwards. These are added together to give total employee jobs by Welsh local authority of workplace and for the UK as a whole.
- For each area, the employee jobs totals derived above are broken down into industry sections by pro-rating the totals using industry level data for each area from BRES (ABI prior to 2009). [Note that although agriculture data at a Wales level are complete within the

BRES dataset, agriculture data at a local authority level are not. Thus figures from the Survey of Agriculture and Horticulture for each year have been used to apportion the Wales agriculture data between Welsh local authorities to derive a complete BRES dataset by industry and local authority.]

- The NUTS2 totals and Wales totals for employee jobs by industry within the data are derived by summing up the estimates for the relevant local authorities.
- Data for the numbers of first and second self-employed jobs by industry and Welsh local authority of workplace (and for the UK as a whole) are extracted from the annual LLFS/APS datasets for 2001 onwards. These are added together to give total self-employed jobs by industry and Welsh local authority of workplace (and for the UK as a whole).
- Again the NUTS2 totals and Wales totals for self-employed jobs by industry within the data are derived by summing up the estimates for the relevant local authorities.
- Finally, the small number of government supported trainee figures are extracted from the
  annual LLFS/APS datasets for 2001 onwards for each area and apportioned between
  industries according to the estimates of employee jobs plus self-employment jobs by
  industry for each area. These estimates of government supported trainees are then added
  to the figures for employee jobs by industry and self-employment jobs by industry to give
  workplace employment by industry for each area represented in the data.

In summary, the methodology is based on results from the annual LLFS/APS to provide estimates of all jobs in the economy, broken down by local area in Wales, with mainly BRES data (ABI data prior to 2009) used to break down the employee element of these data by industry. This is consistent with Recommendation 1 in the National Statistics Quality Review of Employment and Jobs Statistics (NSQR Series Report No.44), published by ONS in January 2006, which sets out the appropriate sources to be used in measuring the structure of different aspects of the UK workforce.

## Timeliness and punctuality

This is an annual statistical bulletin, published in October each year following publication of the BRES data in September.

## Accessibility and clarity

Much of the data behind the tables and charts shown in this bulletin can be found on StatsWales.

## Comparability and coherence

## i) Headline estimates of employment

There are four main reasons why the workplace employment data published here and the headline measure of persons in employment differ (the headline measure for Wales can be found in the latest ONS labour market release for Wales. These reasons are set out below.

- The data in this bulletin are measured on a workplace basis, that is, the data shows a count of jobs in workplaces located in each area, whereas the headline measure of employment is a count of employed residents in each area. A key difference between a count of jobs on a workplace basis in a given area and a count of employed residents of that area is the effect of commuting between areas. It is estimated that in 2016 around 90,000 Welsh residents work in jobs located outside Wales, and around 39,800 non-Welsh residents work in jobs located inside Wales. Thus Wales is a net exporter of employment, and there are many similar flows between the different local authorities within Wales.
- As some employed residents have more than one job, the headline measure of employment will be lower than the count of jobs. There were around 57,800 second jobs in Wales and around 1.1 million second jobs across the UK as a whole in 2016.
- The LLFS/APS data used in this bulletin are taken from the annual LLFS/APS datasets. For Wales, these are made up of the relevant quarterly Labour Force Survey datasets (from which the headline measure is taken), plus additional annual samples of households which allow for much more detailed analysis within Wales than would be available from the quarterly datasets alone. The analysis in this bulletin would not be possible without reference to these annual datasets. There are some small differences between estimates derived from the annual datasets and the quarterly datasets probably arising from their different wave structures. Nevertheless, the annual datasets are internally consistent and consistent over time so that comparisons drawn between the different domains within the data are appropriate.
- The headline measure of persons in employment includes around 9,000 unpaid family workers in the APS for 2016 across Wales and around 127,900 across the UK. These are not recorded when counting workplace employment.

## ii) Workforce jobs estimates

The workforce jobs series by the ONS includes a full breakdown by industry (on SIC 2007) The workforce jobs series continues to only provide industry data at a Wales level, so this bulletin remains the only official source of jobs by industry and local authority for Wales.

 The ONS produce quarterly estimates of workforce jobs by industry (which can be found in the labour market regional bulletin, Tables 4 and 5). These estimates are based on employer's surveys and have self employment added to them based on the Labour Force Survey (LFS) plus HM Forces and Government Support Trainees. These estimates are not available by industry below a Wales level and due to the methodology used show different levels than the estimates in this bulletin. More information on the methodology.

Table A – Comparison of workplace employment (WPE) to workforce jobs (WFJ), 2016

Thousands and Per cent

	Workplace Employment (000s)	Workforce Jobs (000s)	Difference WFJ- WPE (000s)	% Total difference (WFJ-WPE) as % of WFJ	
	Welsh				
	Government	ONS			
Wales					
Employees	1,177.5	1,255.1	77.6	6.2	
Self-employed	220.4	202.2	-18.2	-9.0	
Government-supported					
trainees	6.4	3.6	-2.7	-75.0	
HM Forces	**	2.5	**		
Total	1,404.3	1,463.4	59.1	4.0	
UK					
Employees	27,074.7	29,798.6	2,723.9	9.1	
Self-employed	5,261.7	4,496.0	-765.7	-17.0	
Government-supported					
trainees	76.1	57.1	-19.0	-33.3	
HM Forces		157.8			
Total	32,412.6	34,509.6	2,097.0	6.1	

<sup>..</sup> Not Applicable

The key differences between the workforce jobs by industry series and the workplace employment series can be explained through differences in the underlying data sources and the methodology used. For example for self employment the workplace employment series uses the Annual Population Survey, whilst the workforce jobs series uses the Labour Force Survey. There is a difference between these two sources which could be accounted for by sampling variability.

The largest difference between the two data sources is in the employees' component. Whilst the estimates in this bulletin are constrained to the APS totals, the Workforce jobs series are not. The ONS publish in their labour market overview a <u>table comparing workforce jobs to the Labour Force Survey</u> investigating the differences between the two sources. This explains the differences in the employee components above.

The above link highlights the differences between the LFS and workforce jobs series at a UK level. The ONS identifies 30 reasons why this occurs, including sampling variability and timing of the datasets. Other key points to note are that:

- The workforce jobs series has some issues with double-counting due to over-reporting of self-employment.
- Workforce jobs data contains HM Forces data whilst the LFS only contains armed forces employee jobs living in private households.
- The LFS only captures those with first and second jobs, excluding those with third and subsequent employee jobs.

 The LFS contains information on unpaid family workers, and a greater number of government supported trainees than the workforce jobs data.

The ONS also publish total jobs in their jobs density estimates (which can be found in the <u>labour</u> <u>market regional bulletin</u>, section 9). These estimates differ from those shown in this bulletin as they are based on the same methodology as the quarterly estimates of workforce jobs and include HM Forces.

Table B – Comparison of workforce jobs (WFJ) workplace employment (WPE), by industry, 2016

Thousands

	Total	Employee Jobs	Self Employed	Government Supported Trainees
A:Agriculture, forestry and fishing	-0.50	5.10	-5.57	-0.11
B:Mining and quarrying	-0.40	-0.50	0.05	-0.01
C:Manufacturing	14.50	16.70	-1.51	-0.66
D:Electricity, gas, steam and air conditioning supply	2.80	3.20	-0.37	-0.03
E:Water supply; sewerage, waste management and				
remediation activities	3.20	2.90	0.37	-0.05
F:Construction	-7.80	-8.50	1.03	-0.38
G:Wholesale and retail trade; repair of motor				
vehicles and motorcycles	11.60	14.20	-2.47	-0.18
H:Transportation and storage	12.40	9.90	2.58	-0.11
I:Accommodation and food service activities	-9.60	-10.20	0.81	-0.15
J:Information and communication	-7.40	-6.10	-1.21	-0.08
K:Financial and insurance activities	0.30	0.90	-0.53	-0.10
L:Real estate activities	-3.20	-1.60	-1.58	-0.05
M:Professional, scientific and technical activities	5.50	11.90	-6.40	-0.02
N:Administrative and support service activities	3.40	3.10	0.54	-0.22
O:Public administration and defence; compulsory				
social security	4.90	2.70	-0.07	-0.36
P:Education	4.60	8.20	-3.35	-0.23
Q:Human health and social work activities	9.20	5.50	3.78	-0.06
R:Arts, entertainment and recreation	3.30	5.10	-2.01	0.18
STU: Other industries	3.30	2.50	0.65	0.15
Total	50.10	65.10	-15.25	-2.46

A larger figure shows that workforce jobs estimates by the ONS are higher than workplace employment estimates by the WG. This table excludes HM Forces (which would fall under section O).

## **National Statistics status**

The <u>United Kingdom Statistics Authority</u> has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics.

National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value.

All official statistics should comply with all aspects of the Code of Practice for Official Statistics. They are awarded National Statistics status following an assessment by the UK Statistics Authority's regulatory arm. The Authority considers whether the statistics meet the highest standards of Code compliance, including the value they add to public decisions and debate.

It is Welsh Government's responsibility to maintain compliance with the standards expected of National Statistics. If we become concerned about whether these statistics are still meeting the appropriate standards, we will discuss any concerns with the Authority promptly. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated when standards are restored.

# **Well-being of Future Generations Act (WFG)**

The Well-being of Future Generations Act 2015 is about improving the social, economic, environmental and cultural well-being of Wales. The Act puts in place seven well-being goals for Wales. These are for a more equal, prosperous, resilient, healthier and globally responsible Wales, with cohesive communities and a vibrant culture and thriving Welsh language. Under section (10)(1) of the Act, the Welsh Ministers must (a) publish indicators ("national indicators") that must be applied for the purpose of measuring progress towards the achievement of the Well-being goals, and (b) lay a copy of the national indicators before the National Assembly. The 46 national indicators were laid in March 2016.

Information on indicators and associated technical information - <u>How do you measure a nation's</u> progress? - National Indicators

Further information on the Well-being of Future Generations (Wales) Act 2015.

The statistics included in this release could also provide supporting narrative to the national indicators and be used by public services boards in relation to their local well-being assessments and local well-being plans.

## **Further details**

The document is available at:

http://gov.wales/statistics-and-research/work-place-employment-industry/?lang=en

# **Next update**

October 2018

# We want your feedback

We welcome any feedback on any aspect of these statistics which can be provided by email to economic.stats@gov.wales.

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