Caerphilly County Borough
2nd Replacement Local Development Plan 2020-2035

EB6: Regional Assessment of Future Growth

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CAERPHILLY COUNTY BOROUGH COUNCIL
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Regional assessment of future growth and migration for the Cardiff Capital Region

SEWPOS / SEWSPG

May 2024

SQW

EDGE ANALYTICS

Turley

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Client
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Executive Summary

1. Turley, SQW and Edge Analytics were appointed by the South East Wales Planning Officers Society (SEWPOS) and the South East Wales Strategic Planning Group (SEWSPG)[1] to undertake a regional assessment of future growth and migration for the Cardiff Capital Region (CCR).

2. Future Wales identifies much of the CCR as one of three National Growth Areas under *Policy 1: Where Wales will grow*[2]. Whilst this study has taken a 'policy-off' approach to the assessment of potential growth, the areas designation in national policy and the expectations associated with this are recognised as forming an important context, having implications for how individual authorities develop their own evidence and local policy responses. Similarly, this assessment has been developed with an appreciation of the scale of historic and planned investment directed towards the CCR, including but not limited to the award of a City Deal, signed in 2016, with its stated aim to deliver 25,000 new jobs.

3. It is within this context that this research responds to a series of study objectives set by the commissioning group, which require the following to be assessed:

   - How each Local Planning Authority (LPA) could contribute towards increasing the number of jobs across the region by 2040.
   - How the increase in jobs corresponds with projected growth in the population of individual LPAs and the CCR.
   - The migration assumptions underpinning the proposed level of population/jobs growth.
   - The potential implications of the spatial distribution of jobs and people on travel patterns.
   - How the projected growth in population and jobs aligns with Future Wales 2040 and recently adopted or emerging LDP strategies.

4. The outputs of this study are intended to sit alongside and complement the individual evidence-based studies developed by the component authorities. The study offers an important opportunity to present a composite and consistent picture, drawing on the latest available data at the time of its commissioning, but is not intended to replace or supersede the detailed consideration of growth potential or the interplay between drivers of population and employment growth prepared by individual authorities.

[1] These are regional co-operative groups that have been formed by representatives from the constituent Local Authorities of Blaenau Gwent County Borough Council, Bridgend County Borough Council, Cardiff Council, Caerphilly County Borough Council, Merthyr Tydfil County Borough Council, Monmouthshire County Council, Newport City Council, Rhondda Cynon Taf County Borough Council, Torfaen County Borough Council, Vale of Glamorgan Council and Bannau Brycheiniog (formerly Brecon Beacons National Park).

[2] It is noted that the entirety of the authority area of Monmouthshire falls outside of the designation.

5. The methodological approach adopted within the assessment has broadly followed a comparable process to that used at an individual authority level to assess growth potential and the relationship between the important drivers of demographic change and job generation. This has included the use of the following informing principal datasets and models:

- Baseline econometric forecasts. The most up-to-date forecasts available at the time at which the analysis was undertaken were purchased from each of the three main forecasting houses – Experian (September 2023), Oxford Economics (December 2023) and Cambridge Econometrics (April 2023).

- Demographic modelling. Edge Analytics used the POPGROUP suite of software[3] to develop CCR wide demographic projections built up from constituent local authority level models. The modelling drew upon the latest available Office for National Statistics (ONS) datasets which include the 2022 Mid-Year Estimate (MYE) and the ONS rebased historical MYE population dataset, which was released in November 2023 to ensure alignment with the results of the 2021 Census.

6. Importantly, and distinct from many of the individual authority level studies, this research has not sought to translate these projections into either housing or land requirements for authorities or at the CCR level.

Estimating future job growth

7. To inform an assessment of the potential for employment growth across the CCR, the study initially reviews recent historic performance. This indicates that despite significant long-term challenges, the CCR economy has performed well in employment terms in recent years.

8. Over the period 1999–2019, growth of around 4,250 jobs per annum has been driven across the CCR by professional and business services and by public service activities, especially in healthcare. There has also been growth in information and communications and in accommodation and food service. However, this growth has been partially offset by a contraction in manufacturing, which was especially sharp in the early 2000s.

9. The study then considers the three baseline forecasts. These anticipate that the CCR will continue to create new employment opportunities out to 2040. An average of the three forecasts suggests job growth of close to 2,500 jobs per annum, with this considered to represent a reasonable baseline position from which to subsequently consider the potential for higher job growth. This level of job growth is more modest than that recorded historically, consistent with the views of the forecasting houses at a national level.

10. Whilst this baseline is a model-based extrapolation of UK-wide trends and assumptions, it does not take account of specific local growth opportunities or identified planned investment. To capture the potential for stronger growth rather

[3] It is noted that Welsh Government uses the POPGROUP suite of software and it has been used extensively within the existing evidence base reports of the constituent authorities in the CCR.

than using an econometric model resulting in an alternative forecast, the study has adopted an approach which seeks to build a future growth 'narrative', This aims to establish whether, and to what extent, there is a plausible pathway to future jobs growth to 2040 and how this might be distributed at local authority level. This seeks to consider historic trends and indications of future investment based upon an interpretation of the information provided by individual authorities and the CCR. The research has sought to triangulate:

- Evidence of regional strategy and major investments that are coming forward at regional level (including those associated with the CCR City Deal)
- Evidence of significant 'known' local investments and other growth opportunities
- Further analysis of historical trend and forecast data at local level (including material prepared for local employment and reviews and other studies) to consider growth in specific sectors and localities.

11. Following this approach, the study has developed a higher potential jobs growth scenario, which anticipates the creation of 85,086 additional jobs between 2022 and 2040, or 4,727 per annum, across the CCR. This is broadly in line (at regional level) with the 1999–2019 growth trajectory and represents a significant increase on the baseline level of growth. In presenting this assessment of future jobs growth potential, it is important to recognise that it does not represent an 'upper limit': individual authorities may have wider policy objectives that could establish ambitions for levels of growth which exceed that assessed.

Potential implications for population growth

12. In assessing the potential implications that the differing scenarios of job growth could have on the population Edge Analytics has generated a series of demographic past trend and employment-led scenarios. These have integrated a range of labour-force behaviour assumptions alongside the latest demographic information available. Collectively, these scenarios allow for an understanding as to the extent to which different levels of forecast job growth could impact levels of migration, contrasted against a continuation of historic trends.

13. This has identified that:

- A continuation of population growth based on either short or long-term historic trends would support the CCR to achieve a level of job growth suggested by the baseline forecast to 2040.
- A stronger level of population growth, in the order of a growth of just over 130,000 people by 2040, would potentially be required to support the higher level of jobs growth identified through the study. This level of population growth would represent approximately a doubling of that projected based on long-term trends and imply the need for a higher level of net migration into the CCR than has been seen on average historically. The implied levels of net migration annually are not, however, without precedent, noting that the latest data suggests that levels of migration more than the required annual average have occurred in recent years.

Spatial implications

14. Historically, job growth within the CCR has been strongest in Cardiff and (more recently) Newport, with Cardiff's share of employment gradually increasing over time. The baseline forecasts suggest that, apart from Blaenau Gwent, all the authorities are expected to continue see an increase in employment to 2040. The baseline forecast also suggests that Cardiff and Newport will see stronger rates of growth compared to other parts of the CCR, which would see their share of total jobs in the region increase.

15. Whilst under the higher potential jobs growth scenario each authority is expected to see a significant increase on the baseline growth figure, the largest increases over the baseline are in Blaenau Gwent (where the baseline is negative), Caerphilly and Torfaen.

16. The higher potential jobs growth scenario forecasts employment growth which is more closely aligned to actual net additional job creation in the 1999-2019 period across CCR. However, there are some differences at local level between identified potential growth and the historic trend:

    - Historic trend growth in Blaenau Gwent and Torfaen is negative, mainly reflecting manufacturing contraction. The higher potential jobs growth scenario implies a substantial reversal of this trend.

    - Historic trend growth in the Vale of Glamorgan is also negative, although the higher potential jobs growth scenario anticipates growth of some 370 jobs per annum. This reflects the presence of substantial 'known' investments in the Vale, some of which are regionally significant in scale.

    - In Rhondda Cynon Taf and Newport, the higher potential jobs growth scenario suggests a rate of employment growth which exceeds that suggested by the historic trend. In the case of Newport, this reflects the fact that the 20-year trend is depressed by significant manufacturing losses (e.g., Llanwern) in the early 2000s: the post-2009 trend has been much stronger and is arguably more reflective of the city's economy.

    - This is offset by somewhat lower than historic trend growth elsewhere in the region.

17. Overall, the higher potential jobs growth scenario anticipates that the proportionate distribution of jobs will be broadly similar as at present. As a result, when considering the relationship with potential population change it remains the case that Cardiff is expected to continue to grow its proportionate share of the population in the CCR, when contrasted with the implied changes associated with a continuation of long-term historic trends. There are comparatively minor differences across the other authorities, with the implied strength of job growth suggesting a higher proportionate population share than under a continuation of historic trends in Bridgend, Vale of Glamorgan and Blaenau Gwent.

18. The latest available data continues to confirm that the CCR is a net exporter of labour, with close to 30,000 more people travelling out of it to work than travel in. Such flows are enabled by existing transport infrastructure and the proximity of employment opportunities in economic centres such as Bristol, Neath Port Talbot and the adjacent

towns in South Gloucestershire. The modelling underpinning the findings above has assumed that such flows are sustained, recognising the challenges associated in forecasting and justifying alternative assumptions. Consideration has been given to a hypothetical scenario whereby the CCR sees a self-containment of labour, reflecting at least in part aspirations set out within the National Transport Strategy to see changes to travelling behaviours associated with the investment in the transport network within the CCR. This 'self-containment' analysis has highlighted that the higher potential jobs growth forecast could theoretically be accommodated through a more modest level of population growth, assuming that more of the resident labour force is deployed in jobs within the CCR (rather than commuting out of the CCR). It is noted, however, that within the CCR itself existing commuting patterns would, in broad terms, be expected to be sustained, with flows continuing in the direction of Cardiff and Newport to reflect the fundamental differences in the balance of jobs and labour-force within individual authorities.

Policy considerations

19. As stated above, in addressing the study objectives the analysis has been undertaken based on 'policy-off' assumptions. It has not therefore sought to factor in policy objectives beyond the identification of or targeting of economic investment or designations. The implied trajectories of growth do not, as a result, seek to account for factors relating to the potential capacity of authorities to accommodate the growth in people projected or jobs, nor do they seek to reflect separate ambitions of authorities or indeed the CCR to use supply as a lever for achieving alternative outcomes. Such factors will be considered and evidenced as part of the development of policy, be that in the form of LDP reviews or, in the future, a Cardiff City Region sub-regional plan.

20. In this context, high level consideration is given to the comparative alignment with national policy in the form of Future Wales and then existing and emerging LDPs across the CCR.

21. Looking first at Future Wales it is understood that the identified sub-regional targets for housing growth were underpinned by the 2018-based Principal Welsh Government projections. In comparing the different levels of projected population growth presented in this research with this earlier dataset it is apparent that supporting the higher level of potential job growth identified would necessitate a stronger level of population growth and by inference net migration into the city region. In contrast, the implied level of population growth under the official projections would be expected to broadly support growth at a level more aligned with that presented by the baseline job forecast.

22. At a local authority level, the higher level of potential job growth identified aligns comparatively closely, albeit slightly lower, than the cumulative job growth levels which are referenced within emerging development plans. Accounting for the latest demographic datasets and the modelling undertaken by Edge Analytics similarly suggests that a slightly lower level of population growth than identified within the evidence informing the emerging development plans would support the full range of potential jobs growth identified in this study.

1. Introduction

1.1 Turley, SQW and Edge Analytics were appointed by the South East Wales Planning Officers Society (SEWPOS) and the South East Wales Strategic Planning Group (SEWSPG)[4], hereafter the commissioning group, to undertake a regional assessment of future growth and migration for the Cardiff Capital Region (CCR).

Scope of work and study objectives

1.2 The research responds to a series of study objectives set by the commissioning group, which require the following to be assessed:

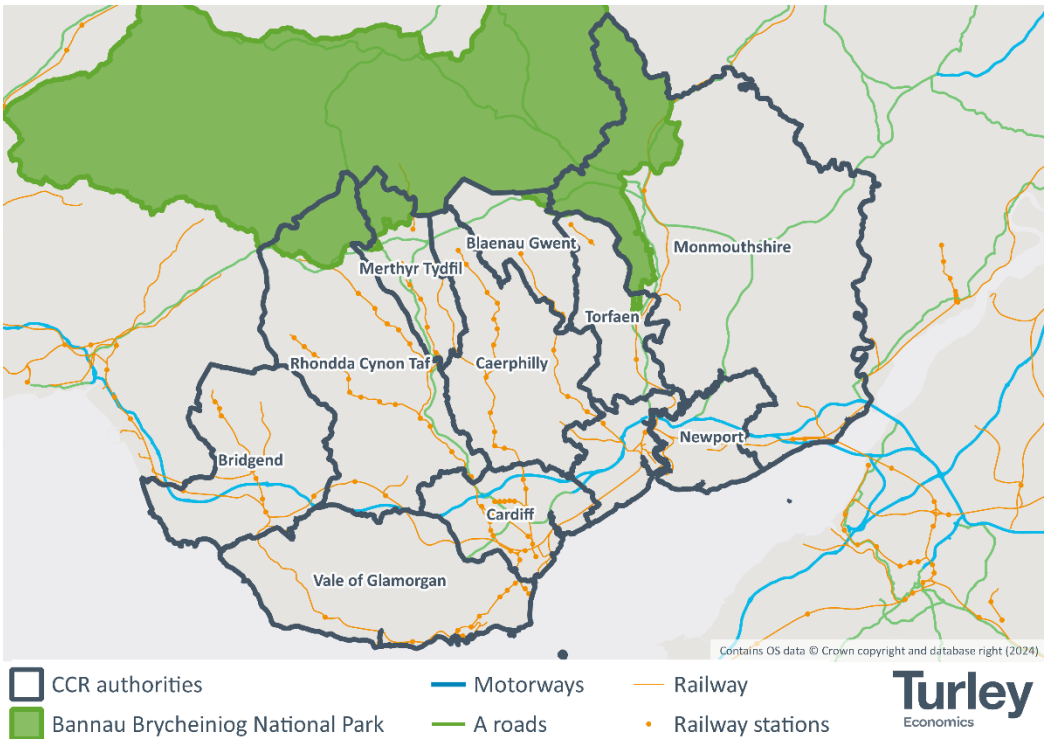
- How each Local Planning Authority (LPA) could contribute towards increasing the number of jobs across the region by 2040.
- How the increase in jobs corresponds with projected growth in the population of individual LPAs and the CCR.
- The migration assumptions underpinning the proposed level of population/jobs growth.
- The potential implications of the spatial distribution of jobs and people on travel patterns.
- How the projected growth in population and jobs aligns with Future Wales 2040 and recently adopted or emerging LDP strategies.

Study area geography

1.3 Research outputs have been analysed and presented at the CCR level and disaggregated to the ten authority areas, which include parts of the neighbouring Bannau Brycheiniog National Park. These geographies are shown in Figure 1.1.

[4] These are regional co-operative groups that have been formed by representatives from the constituent Local Authorities of Blaenau Gwent County Borough Council, Bridgend County Borough Council, Cardiff Council, Caerphilly County Borough Council, Merthyr Tydfil County Borough Council, Monmouthshire County Council, Newport City Council, Rhondda Cynon Taf County Borough Council, Torfaen County Borough Council, Vale of Glamorgan Council and Bannau Brycheiniog (formerly Brecon Beacons National Park).

Figure 1.1: Cardiff Capital Region and constituent Local Planning Authorities



Source: Turley

1.4 The CCR contributes in the order of 50% of the Welsh economy and has a population of approximately 1.5 million people, again representing about half of the country's population.

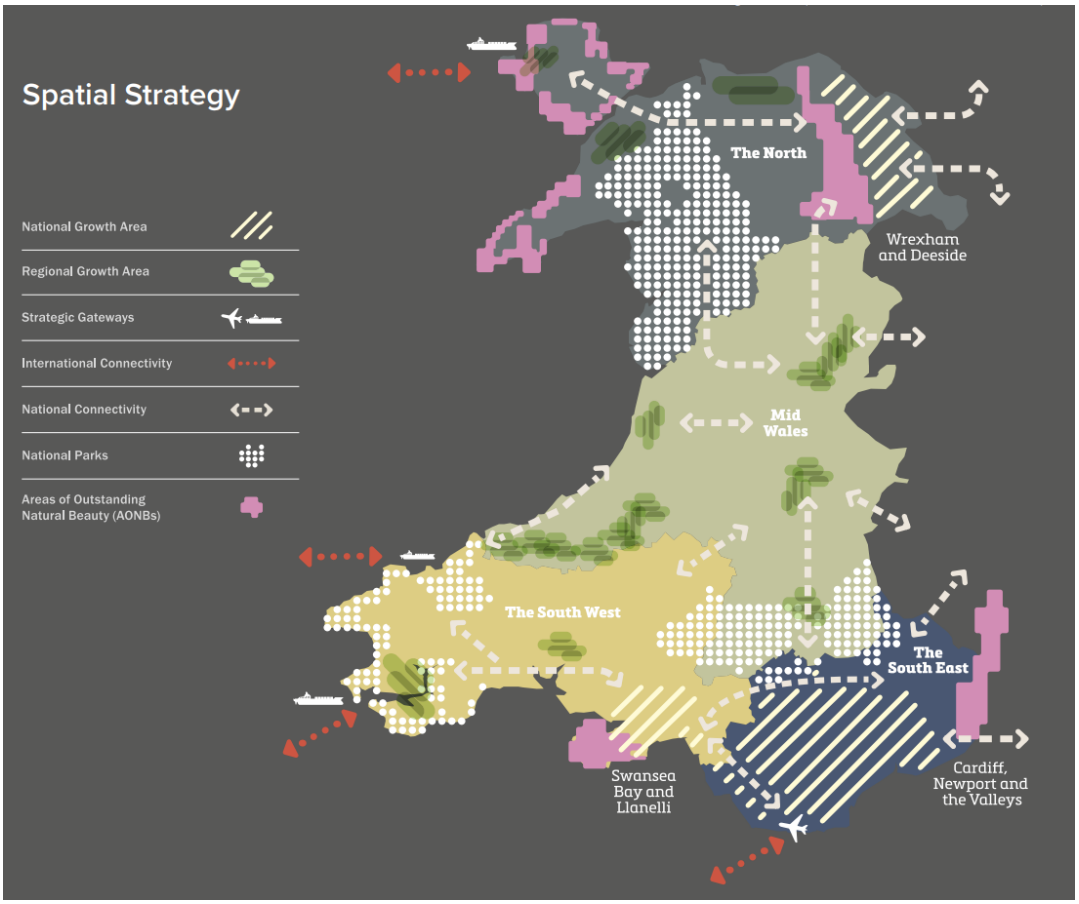
1.5 Figure 1.1 also shows the strategic transport infrastructure within the CCR. Where the research considers the current and future distribution of growth and the relationship between the location of employment and the residence of a labour-force the existing infrastructure form an important context.

Policy context

1.6 The National Development Framework for Wales (NDF) published February 2021 sets the national direction for growth and development in Wales to 2040. Future Wales: The National Plan 2040 (hereafter Future Wales) is the national development plan for Wales and forms part of the statutory development plan for local authorities in Wales.

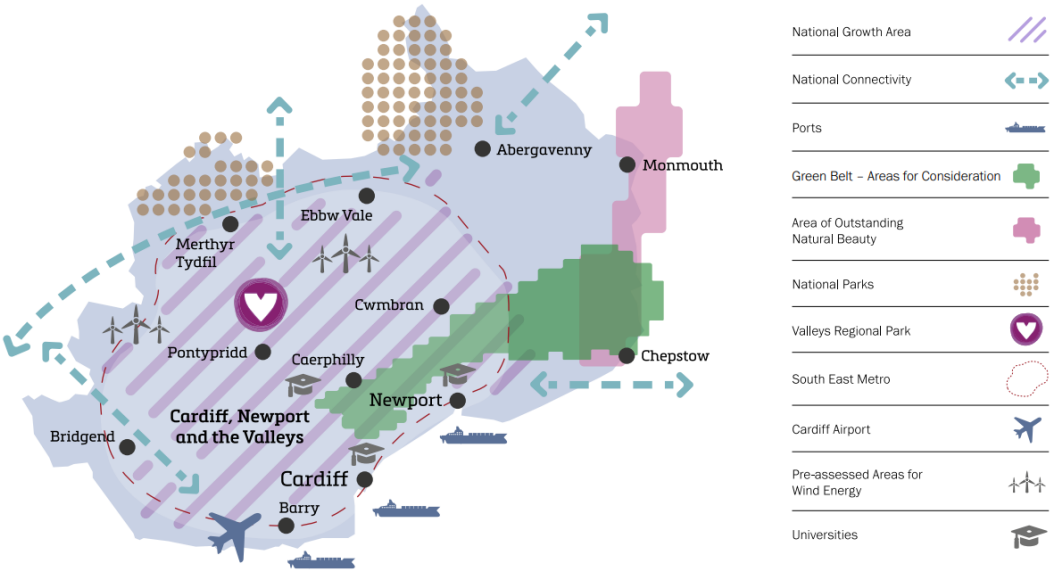
1.7 Future Wales identifies much of the CCR as one of three National Growth Areas under *Policy 1: Where Wales will grow*. This is illustrated in Figure 1.2, replicated from Future Wales, which also shows the strategic relationships with other parts of Wales, including the Swansea Bay and Llanelli Growth Area to the west. The South East Regional Diagram is also replicated at Figure 1.3, with this providing a more granular level of detail. This indicates that whilst the majority of the CCR falls within the designated Growth Area the authority area of Monmouthshire falls outside of the designation.

Figure 1.2: Future Wales: Spatial Strategy



Source: Future Wales

Figure 1.3: The South East Regional strategic diagram



Source: Future Wales

1.8 The spatial strategy in Future Wales confirms that:

'Co-locating homes, jobs and services means focusing on cities and large towns as the main development areas…Growing urban areas across Wales will create concentrations of jobs, services and amenities and a critical mass of people to sustain good public transport services and a range of economic activities.' (Future Wales, page 60)

1.9 Within this context the Policy confirms that:

'In three National Growth Areas there will be growth in employment and housing opportunities and investment in infrastructure' (Future Wales, page 62)

1.10 Future Wales identifies its expectations for growth by estimating a need for 66,400 additional homes over a twenty-year period to 2039. This scale of need is derived directly from the 2018-based Sub-National Population and Household Projections (SNPP / SNHP) in accordance with Planning Policy Wales (PPW) which confirms that the latest Welsh Government (WG) generated authority level demographic projections are expected to *'form a fundamental part of the evidence base for development plans.'*[5]

1.11 Importantly Future Wales acknowledges under Policy 7 that:

'The national and regional estimates of need do not reflect future policies or events and are not a Housing Requirement for Wales or the regions. However, the estimates do provide part of the evidence and context on which housing policy and requirements can be based. The estimates of market and affordable housing need should inform the housing requirements set out in Strategic and Local Development Plans and it is expected the housing requirements will differ from the estimates of housing need.'[6]

1.12 It is recognised, in the context of this research, that PPW proceeds to state, in the context of developing planning evidence that:

'Planning authorities need to assess whether the various elements of the projections are appropriate for their area, and if not, undertake modelling, based on robust evidence, to identify alternative options.'[7]

1.13 In undertaking such an assessment, it states that the official projections:

'…should be considered together with other key evidence in relation to issues such as what the plan is seeking to achieve, links between homes and jobs, the need for affordable housing, Welsh language considerations and the deliverability of the plan, in order to identify an appropriate strategy for the delivery of housing in the plan area.'[8]

1.14 Nationally, the WG's Economic Action Plan (2017) highlighted the existence of spatial variations in economic outcomes across Wales, in the context of a persistent productivity deficit overall. It committed to an enhanced regional approach to

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[5] Welsh Government (2024) Planning Policy Wales, Edition 12, paragraph 4.2.6

[6] Future Wales: The National Plan 2040 (2021)

[7] *Ibid,* paragraph 4.2.7

[8] *Ibid,* paragraph 4.2.6

economic strategy, reflected in *Future Wales* and informing regional strategy approaches. This strategy also reflected the award of a City Deal for the CCR, signed in 2016, which established the stated aim to deliver 25,000 new jobs.

1.15 In the context of the above the individual LPAs within the CCR have recently or are in the process of undertaking reviews of their Local Development Plan's. Their preparation has involved producing individual detailed assessments of potential reasonable growth scenarios accounting for an understanding of the role that population and employment growth will play in each. This research acknowledges this existing evidence base, considered in more detail in subsequent sections of this report, and is not intended to replace or supersede the detailed consideration of these aspects by individual authorities.

Report structure

1.16 This report is structured as follows:

- Section 2: Research process and methodology
- Section 3: Updated trend-based population projections
- Section 4: Estimating baseline economic growth
- Section 5: Considering economic strategy and investment
- Section 6: Implications for migration and population growth
- Section 7: Policy considerations

2. Research process and methodology

2.1 This section provides an overview of the research process and methodology adopted to address the study objectives. In doing so it recognises and provides a high-level summary of the evidence that has been assembled by individual LPAs to inform emerging planning policy. This recognises, as explained in section 1, that this research does not approach the subject of assessing regional growth in population or employment in isolation from the work undertaken at the constituent authority level.

2.2 The deployment of our method has, however, been timely in that it proceeded the release of updated demographic data by the ONS which has considered the results of the 2021 Census. This has allowed the demographic modelling to provide a consistent and up-to-date assessment of the latest demographic data available and which will be drawn upon in the publication of the next iteration of SNPP/ SNHP by the WG which are not anticipated to be published before the end of 2024.

Building from the existing evidence base

2.3 Most of the constituent LPAs have, in recent years, commissioned and/or prepared comparable pieces of analysis to assess reasonable job forecasts and therefore 'employment-led' forecasts of growth and trend-based 'demographic-led' projections. In developing reasonable scenarios of growth these studies have also considered other potential drivers of growth, including potential levels of housing delivery and the need for affordable housing (referenced hereafter as dwelling-led).

2.4 Edge Analytics, who have provided the demographic modelling inputs to this piece of research, have been responsible for generating a large proportion of the constituent authorities' research. These studies have all been undertaken at an individual authority level.

2.5 Where this research is tasked with consistently assessing a reasonable level of potential employment growth within the CCR and its distribution between authorities, it is useful to consider how each authority has currently interpreted its evidence base in the presentation of an anticipated level of future job growth. It is noted that whilst this provides important context this research has independently considered the latest information on demographic projections Table 2.1 provides a summary of documents which provide fuller explanations and includes hyperlinks to those of most relevance.

2.6 It is apparent that in many cases the scale of job growth targeted is the outcome of a projected level of labour-supply, often associated with a stipulated dwelling-led target. All the authorities are understood to have considered in detail how job growth and population could change and how they will align with one another over a plan period. It is apparent, equally though, that there is no single consistent approach adopted and that authorities have sought in many cases to integrate policy-on strategies in the identification of planning for future need and demand.

Table 2.1: Overview of the latest evidence-based assessment of future job growth by LPA

Authority	Forecast average job growth per annum[9]	Overview of evidence-based rationale and explanation
Blaenau Gwent	100	The Growth Options Background Paper (2020) confirms that the minimum target of 1,500 jobs is based on the Tech Valleys commitment to deliver 1,500 jobs (Ebbw Vale Enterprise Zone). This is set in the context of a baseline Oxford Economics forecast presented within The Employment Land Review (ELR) Study in 2019. A higher aspirational jobs growth target for 3,375 new jobs (225 jobs per annum) is also referenced in the Preferred Strategy RLDP (2020) under Strategic Policy 1: Sustainable Economic Growth, based on the 'policy-on' scenario in the ELR. The aspired level of job growth is confirmed as being based on reducing out-commuting, increasing the economic activity rate and reducing unemployment, representing a substantial reversal of the historic trajectory and labour demand forecast. The authors of the ELR provided an assessment of the impact of wider economic events on the study in 2023 concluding that the conclusions remained appropriate.
Bridgend	500	The Background Paper 2: Strategic Growth Options (SD35) draws upon the *Economic Evidence Base Update (2021, SD70)* which explain that the job target is derived from an estimated growth in the labour-force associated with a demographic-led projection which assumes a continuation of short-term migration trends. This is modelled within an Experian model which also suggests that this projected growth in the workforce would far outpace its own forecast job growth. The Strategy therefore assumes an employment-land supply approach to generate jobs for a growing workforce.
Caerphilly	258	The explanation of the 'jobs target' is provided within the Employment Background Evidence Paper (2022) and the PS4 Population and Housing Growth Options paper (2022). These confirm that it reflects the level of labour forecast to be supported where growth aligns with a midpoint of two 'dwelling-led' scenarios (adopted LDP and 15-year average delivery). Anticipated growth is also observed as facilitating a growth in the working age population at a rate (4.2% per annum) which would support the

[9] Note: These are calculated based on the total jobs figure over the number of years in the stipulated plan period. Plan periods vary in terms of their start and end dates.

		CCR City Deal growth ambitions, where the target of 25,000 jobs equates to a 3.76% increase in employment across the region.
Cardiff	2,153	The Preferred Strategy document confirms that the job target is derived from the level of labour-force growth / employment able to be supported by a policy-led dwelling requirement of 1,600 homes per annum. This is one of a number of scenarios considered in an informing study by Edge Analytics into demographic projections (2021). The scale of job growth also falls within the range considered within The Employment Land Study (2022) which has been modelled using POPGROUP and is understood to be justified on the basis that it assumes a return to a more positive outlook of housing completions for the city.
Merthyr Tydfil	125	The adopted Replacement LDP identifies that the job target is justified based on assuming an increase in the County Borough's population to reflect stronger levels of historic completions in line with past build out rates (dwelling-led). The supporting modelling is presented in the Population and housing requirements background paper 2017.
Monmouthshire	416	The job target is identified as being a 'policy-on' scenario which will address the demographic and affordability challenges facing the County. It is based on a demographic based projection which is presented in the Updating the RLDP Demographic Evidence (2021) study. The selected scenario assumes several adjustments to underlying migration levels (19-year trend with adjustments which assume higher in-migration from Bristol and South Gloucestershire to account for the removal of the Severn Bridge Toll) and labour-force behaviours, including a reduction in net out-commuting, to derive a positive population growth and associated employment target. The Employment Land Review (2022) confirms that the job target is driven by policy interventions intended to support housing and employment growth to achieve an outcome which exceeds a continuation of trends.
Newport	576	The Preferred Strategy Replacement LDP (2023) explains that the preferred growth strategy is drawn from the scale of labour-growth supported on the basis of a continuation of past delivery rates over a 10 year period (2010/11 – 2019/20), which excludes covid years. It is described as being most appropriate where it will support continued growth and allows it to contribute to Newport's principal role with the South East Wales National Growth Area and accommodate opportunities for job growth in existing sectors and emergent industries.

RCT	266	The Preferred Strategy Revised LDP (2024) identifies a level of jobs growth which is associated with population projections derived from the Welsh Government 2018 Principal Population Projections. This level of job growth is presented as being reflective of RCT's position within the National Growth Area, albeit the Draft Plan recognises that higher demographic projections have been modelled which are associated with higher employment growth projections, as well as projections suggesting lower growth. The Employment Land Review (July 2023) presents a baseline economic forecast showing modest employment growth. A separate employment-led Policy-on scenario is referenced in the Draft Plan which suggests growth of 168 jobs per annum, with both implying a decrease in the working age population when input into demographic modelling.
Torfaen	179	Where it is recognised that the Plan is being withdrawn and new evidence is being assembled the previous draft Plan based its projection of growth on a dwelling-led scenario of 320 homes per annum, with this explained within the Welsh Government response to Replacement LDP consultation as being based on the 'better performing residential Candidate and Preferred Strategic Sites' and 50 ha of employment land coming forward within the plan period. Demographic modelling was used to project the scale of labour-force growth and therefore employment which could be supported. A draft Employment Land Review (2024) has been prepared. This includes four employment growth scenarios, which suggest a range of job growth per annum from -107 to +322, with the latter being identified 'policy-on' scenario aimed at seeking to promote growth within key sectors in the authority.
Vale	356	The Preferred Strategy Replacement LDP (November 2023) explains that the job target is set out within the latest Employment Land Review which recommends that provision be made, based on historic take-up, for 67.80 ha of land which would create the capacity to support 5,338 jobs over the plan period. The LDP also confirms that the Council selected a 'Dwelling-led 10 Year Scenario' as its preferred growth option, with the informing evidence base used demographic modelling to confirm that the supported growth in population would enable the what is described in the Housing and Employment Growth Options paper (September 2023) as a 'comparable' level of job growth.
Total CCR	**4,929**	

Source: Turley review

Methodological approach

2.7 The methodological approach adopted has broadly followed a comparable process to that used at an individual authority level to assess growth potential and the relationship between the important drivers of demographic change and job generation. Importantly, and distinct from many of the individual authority level studies, this research has not sought to translate these projections into either housing or land requirements for authorities or at the CCR level.

2.8 Common to many of the studies referenced in Table 2.1 the methodology has used the following informing principal datasets and models:

- Baseline econometric forecasts. The most up-to-date forecasts available at the time at which the analysis was undertaken were purchased from each of the three main forecasting houses – Experian (September 2023), Oxford Economics (December 2023) and Cambridge Econometrics (April 2023).

- Demographic modelling. Edge Analytics used the POPGROUP suite of software[10] to develop CCR wide demographic projections built up from constituent local authority level models. The modelling drew upon the latest available ONS datasets which include the 2022 Mid-Year Estimate (MYE) and the ONS rebased historical MYE population datasets which were released in November 2023 to ensure alignment with the results of the 2021 Census.

2.9 To build upon the informing key baseline information datasets a process of internal engagement has been used to test and augment the understanding of economic potential and contributors to the potential distribution of economic growth. This engagement primarily included a series of discussions with:

- Economic development teams within each of the CCR authorities.

- Representatives of the CCR whose remit is to consider economic growth, funding and the informing evidence-base.

- South East Wales Directors for Economy and Regeneration (SEWDER).

- Transport for Wales (TfW).

- Welsh Government representatives.

2.10 The research process, which was undertaken over an approximate 6-month period, broadly followed the analytical steps set out below:

(a) The commissioning group compiled and shared the key metrics which are the focus of the research, namely future anticipated employment and population growth. A review of the existing evidence-based approach taken by each

[10] It is noted that Welsh Government uses the POPGROUP suite of software and it has been used extensively within the existing evidence base reports of the constituent authorities in the CCR.

authority which informed these metrics was undertaken to understand similarities and difference in the approaches adopted.

(b) Integration of the updated ONS historic back-series of population MYE (2012–2021) and the latest 2022 MYE within new POPGROUP models for each authority. An initial set of trend-based projections were run to understand comparable trajectories to the latest official WG 2018-based dataset.

(c) Audit and critical review of labour-force behaviour assumptions, primarily unemployment, commuting, economic activity rates and double-jobbing. These are required to understand the potential future relationship between employment / job growth and the changing scale and profile of population within the POPGROUP model.

(d) Analysis of the three baseline economic forecasts and a detailed comparison, at a local authority level, with historic levels of performance at a sectoral level. This process was used to build a reasonable baseline estimate of potential job growth within the CCR and its distribution across the authorities.

(e) Derivation of labour-supply led estimates of potential job growth using the POPGROUP model related to identified trend-based demographic projections. A jobs-led scenario using the recommended baseline economic forecast was also developed. These scenarios applied labour-force behaviour assumptions based on the review of informing datasets and assumed a static picture with regards a continuation of existing commuting ratios and therefore relationships between individual authorities.

(f) Initial assessment of the potential relationship between baseline forecast job growth at the CCR level and potential labour-force growth assuming a continuation of demographic trends. This allowed for an appreciation of the extent to which 'headroom' existed to support further job growth. The spatial distribution of this 'headroom' and the implications for potential future commuting patterns were explored using the POPGROUP model.

(g) Development of a potential economic investment and growth narrative for the CCR. This considered CCR wide investment programmes, including City Deal and the Shared Prosperity Fund, and local authority level strategies and investments as well as a consideration of sectoral evidence of local economic specialisms and performance, benchmarked against assumptions in the baseline economic forecasts. This narrative was used to develop a more aspirational employment growth trajectory, which was also input into the POPGROUP model to assess the potential implications for future migration and population growth.

(h) Benchmarking and appraisal of the implied spatial distribution of job growth and population growth derived from the above modelling outputs. The potential for growth to be accommodated based on existing labour-force movements (commuting) and variations of this to account for potential projected divergences in the degree of self-containment of jobs and resident workers were explored.

Feedback and review

2.11 The methodology adopted reflected a clear steer from both the commissioning group and the Welsh Government that the research was intended to advance a high-level appreciation and understanding of the reasonable prospects for economic growth in the CCR and its potential distribution across the component authorities. In accordance with the study brief the methodology has not sought to build an integrated econometric and demographic model. Such models may be developed at a future point in time to assist with the evaluation of CCR funding programmes or in establishing a business case for future funds or indeed as part of a sub-regional Plan evidence base.

2.12 This approach has allowed for a degree of flexibility and judgement within the modelling inputs and the interpretation of analytical outputs. Recognising the insight and narrative based approach to the research the discussion and validation of information and assumptions used in the analysis has formed a central part of the approach.

2.13 At each key stage of the research process the outputs of the research have been shared and presented with the commissioning group for their input and feedback. Similarly, Welsh Government and SEWDER, were briefed early in the research process and as the research reached the stage of developing draft findings. Feedback from all those engaged has been used to refine and validate the methodological approach and input assumptions used.

3. Updated trend-based population projections

3.1 The latest official population projections for CCR are provided by the 2018-based WG round of projections. These projections are trend-based, drawing their future growth assumptions from the historical births, deaths and migration data (both domestic and overseas migration) to mid-year 2018.

3.2 Since these projections were produced, there have been several important demographic updates, including population estimates from the 2021 Census, additional intercensal mid-year population estimates for 2022, and, importantly, a revised historical time-series of population data for the 2012–2021 intercensal period.

3.3 Ahead of the release of new official sub-national projections, this data provides an important updated basis from which to understand how the population of the CCR and the component authorities has changed and could change based on a continuation of historical trends.

3.4 As outlined in the previous section, Edge Analytics has used POPGROUP forecasting technology to develop a series of updated demographic projections which allow for the integration of these latest datasets. The output of this modelling is presented within this section. In presenting the research, this section focuses primarily at the CCR level, with only high-level analysis of individual authorities to explain the implications for the distribution of a changing population. A fuller presentation of the informing demographic data at an authority level is presented through individual authority profiles in Appendix 1.

3.5 As explained in section 2, these updated trend-based projections are then used in subsequent sections as a comparison to the modelled levels of population growth identified as being required across the CCR and at an individual authority level to support varying levels of forecast jobs growth.

Accounting for Census 2021

3.6 The 2021 Census has provided an important update in providing an understanding of the size and structure of the population of England and Wales and the constituent local authorities. At the 2021 Census, the population of CCR was estimated to be over 1.52 million, a 2.9% increase since 2001. The 2021 Census population was, however, lower than that projected under the WG-2018 projection in 2021 (1.53 million), and lower than the 2020 mid-year population estimate (1.55 million).

3.7 The mid-year population estimates are produced annually by the ONS by ‘rolling-on’ the previous year’s population estimate, taking into account recorded births and deaths, and estimates of internal and international migration. An element of ‘drift’ between the rolled forward mid-year estimates and the Census is expected, particularly in the case of the estimates of migration to and from local authority areas within the UK and to/from overseas. Therefore, following a Census, the ONS reviews the intercensal mid-year population estimates, and, where necessary, adjusts (‘rebases’) these to ensure that the Census estimates are adequately aligned.

3.8 The rebased mid-year estimates for the 2011-2021 intercensal period were released in November 2023, providing a revised historical time series from which to draw future births, deaths, and migration assumptions.

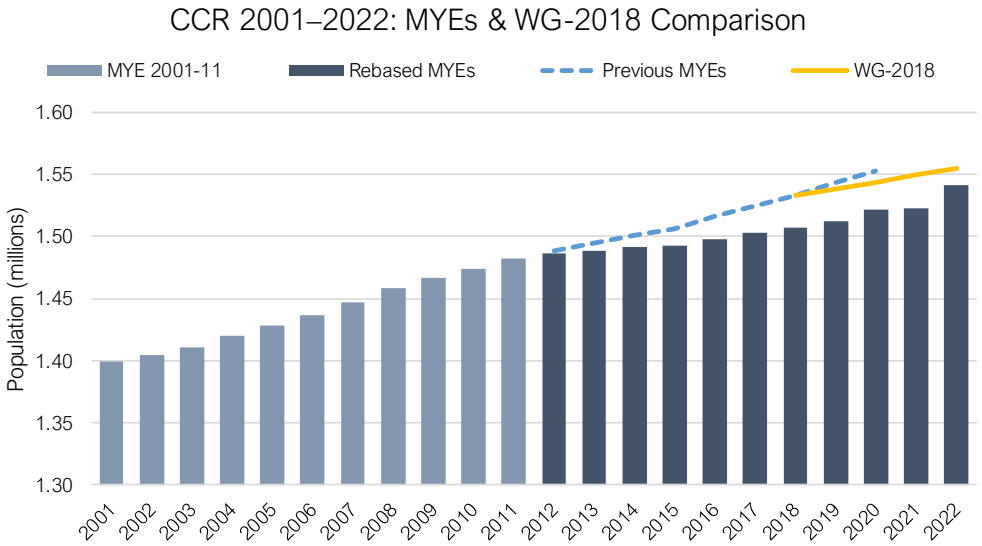
3.9 At a national level, the majority of the difference in the 'previous' and rebased mid-year estimates is attributed to international migration, which is consistently the most challenging aspect of population change to estimate. Within its revisions to international migration within the mid-year estimates, ONS has aligned its methodology with that used in its long-term international migration estimates, which mainly use administrative datasets from Home Office Borders and Immigration data, Department for Work and Pensions (DWP) benefits and earnings data and IPS (International Passenger Survey) data supplemented with the 2021 Census for British Nationals.

3.10 At a regional and local authority-level, the misestimation of internal migration will also have contributed to the observed differences. Natural change is typically subject to limited revisions during the rebasing exercise as births and deaths are recorded in each year, although there have been some adjustments made to account for delayed births registrations due to the COVID-19 pandemic, and the late registration of some deaths referred to coroners.

3.11 Once all adjustments to the components of change are accounted for, there remains some residual differences between the rolled forward population estimates and the Census estimate. At a national level, this is equivalent to -40,400 people, i.e. after applying the rebased components of change, there were 40,400 more people in the rolled-forward population estimates than estimated at the Census. The ONS considers it likely that this 'unattributable population change' (UPC) is associated with migration, either internal and/or international, although it does not assign it to any flow specifically.

3.12 Across the CCR, the Census 2021 population estimate indicated that the population had not grown to the extent previously estimated within the official mid-year estimates. As a result, the ONS has adjusted downwards the historical estimates to provide a rebased trajectory of historical growth back to the 2011 Census. This is illustrated in Figure 3.1 in the context of population change since 2001. For reference, the chart also includes the WG 2018-based projections to illustrate the extent to which these assumed a continuation of historical trends prior to their base date.

Figure 3.1: Comparison of the 2021 Census count and rebased mid-year population estimates and the previous datasets



Source: ONS / WG / Edge Analytics analysis

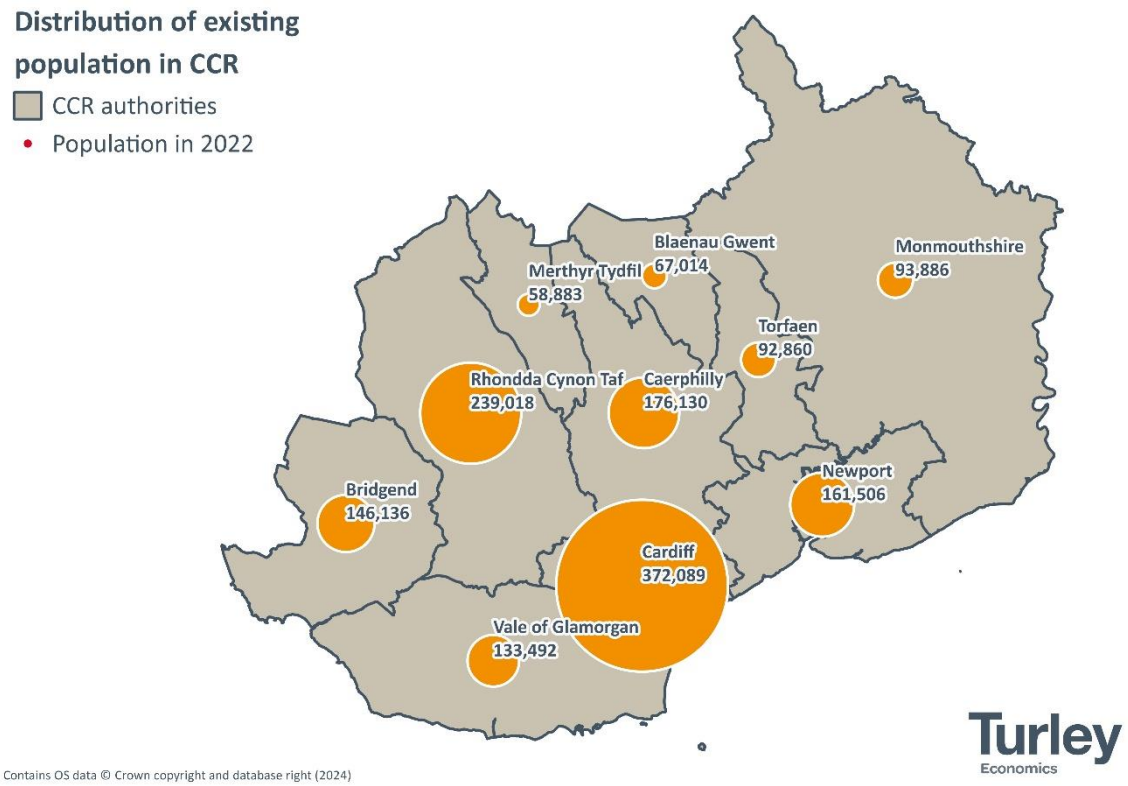
3.13 The modelling presented in this research uses the latest mid-year population evidence, including the rebased mid-year estimates for 2011–21 and the 2022 mid-year estimate. In the case of the latter, it is apparent from Figure 3.1 that this accounts for an estimated substantial growth in the population within the CCR from the 2021 Census year.

The current population

3.14 The 2022 mid-year estimate provides an updated picture of the profile of the current population across the CCR.

3.15 Looking at the spatial distribution of the population first, it is the case that there are quite significant differences in the size of each authority's population. This is shown in Figure 3.2.

Figure 3.2: Size of each authority's population

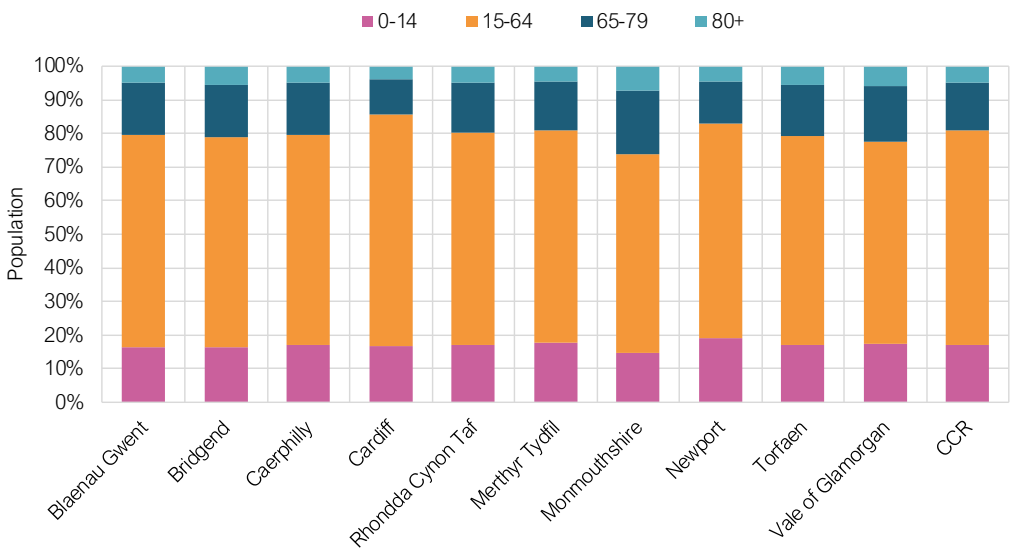


Source: ONS / WG

3.16 This shows that the population of Cardiff is more than twice the size of the population of any other of the authorities, except for RCT. A second tier of authorities can though be formed, based on population size, which includes alongside RCT, Caerphilly, Newport, Bridgend and the Vale. These all have populations exceeding or close to 150,000. The remaining four authorities (Blaenau Gwent, Merthyr Tydfil, Monmouthshire and Torfaen) all have populations of less than 100,000 people.

3.17 Across the CCR there is less of a distinction between the age profile of individual authorities. Figure 3.4 illustrates this by illustrating the profile of each authority, benchmarked against the CCR position. Whilst there is a strong degree of similarity across many it does show that Cardiff for example has a more youthful population with those aged 15 – 64 (core working age) representing a greater proportion of the total population. In contrast, Monmouthshire is revealed as having a much larger proportion of people aged 65+.

Figure 3.3: Population by age group, 2022



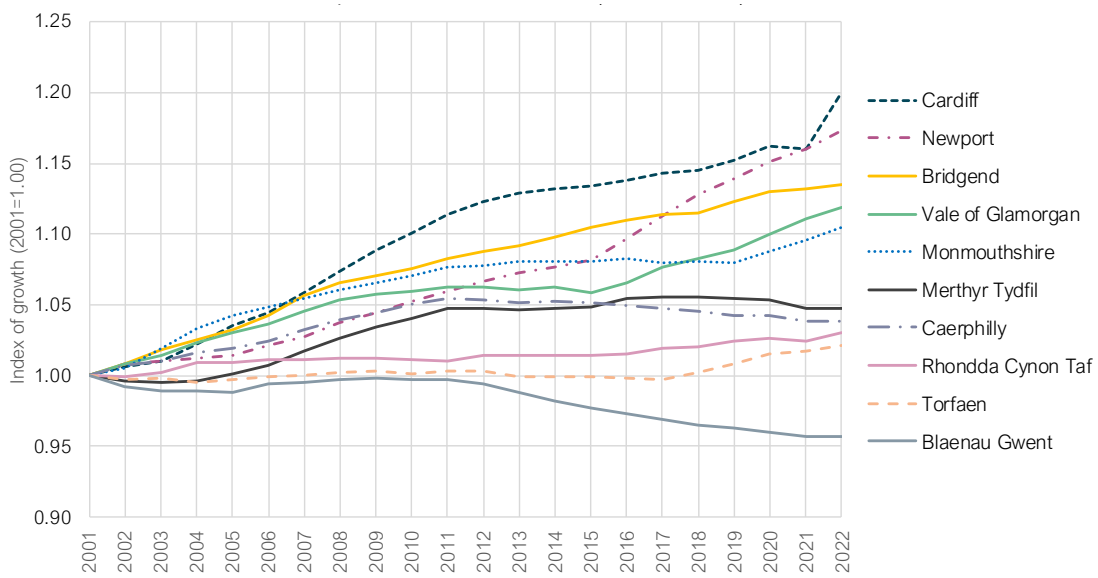
Source: ONS / WG / Edge Analytics analysis

Historical trends

3.18 It is apparent from Figure 3.1 that, since 2011, the population of the CCR has continued to grow, albeit at a slower rate than previously estimated and, with the exception of the last few years, at a rate which is slower than that seen between 2001 and 2011.

3.19 The rate of change of individual authorities has been notably varied, as shown in Figure 3.4.

Figure 3.4: Population Growth Index CCR authorities 2001 – 2022



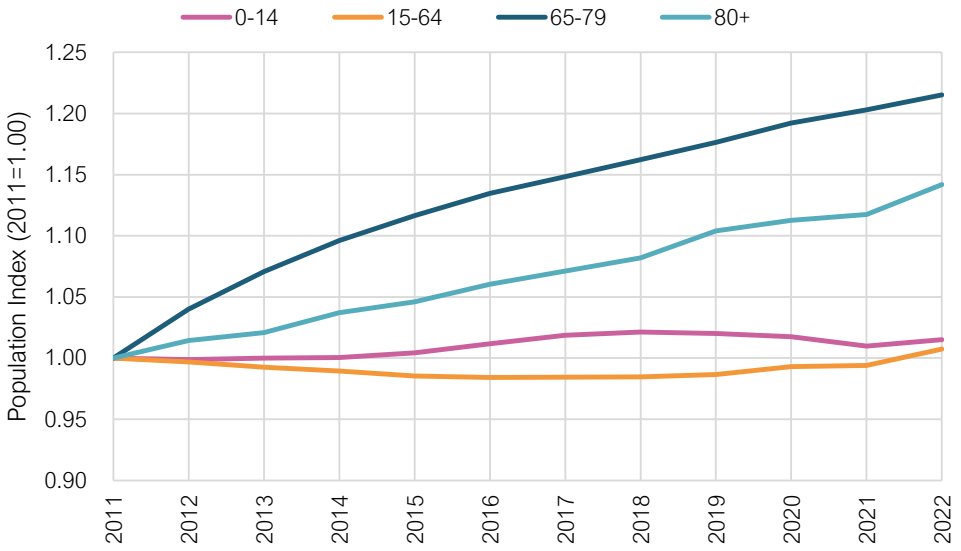
Source: ONS / WG / Edge Analytics analysis

3.20 This shows a contrasting picture across the CCR, with Cardiff, Newport and Bridgend all recording comparatively strong trajectories of growth. In the case of Newport in

particular this growth has accelerated considerably over the last 7 years. In this context it is noted that the Vale has also seen strong growth over a similar period, albeit preceded by a period of population stagnation. Blaenau Gwent stands out as seeing its population decline back to 2001, with this trend seeing an acceleration since 2011 but then appearing to level off in more recent years. A comparable recent trend has also been seen in Caerphilly, albeit this does not offset in full a relatively strong growth in its population between 2001 and 2011. Over more recent years RCT, Torfaen and Merthyr Tydfil have all seen stable populations with little or negligible growth. In contrast where Monmouthshire saw a comparatively stable population since 2011 it has seen a marked positive growth trend since 2019.

3.21 At a CCR level the changing size of the population has resulted in a changing age profile as well. As Figure 3.5 shows it is the case that the increase in population has been primarily driven by an increase in those aged 65+, with the 15 - 64 and 0 - 16 age groups seeing very little change in their overall size over this period.

Figure 3.5: Population growth by age group across the CCR

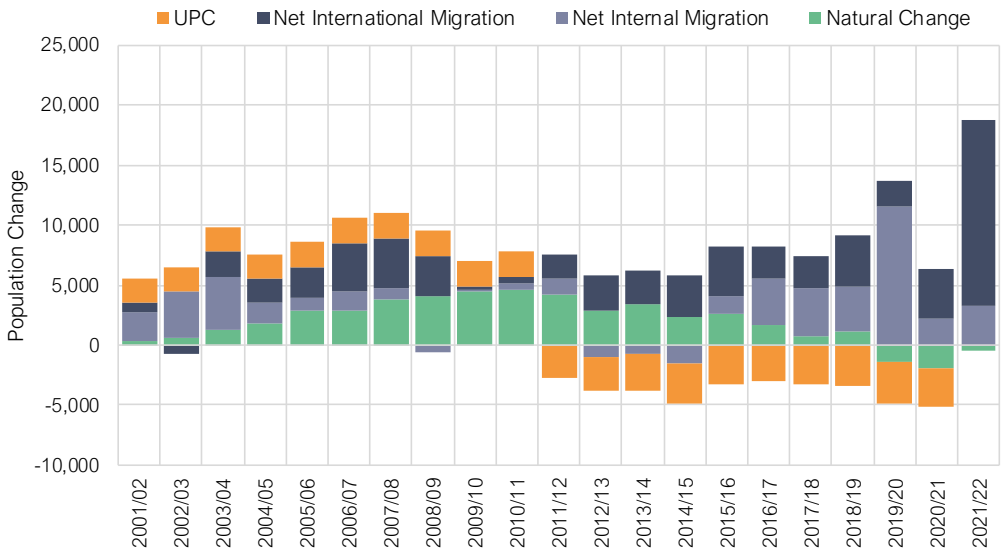


Source: ONS / WG / Edge Analytics analysis

3.22 Changes in the population arise either from the net balance between births and deaths (natural change) or migration (internal or international). Figure 3.6 shows the respective contributions of these components on an annual basis across the CCR. It is noted that this includes a separately identified component labelled as UPC or Unattributable Population Change, i.e. population growth that cannot be accounted for by any of the components of change. As outlined above, this arises from post-Census rebasing exercise. It is noted that between 2001 and 2011, UPC was a positive adjustment – i.e. the population was under-estimated over this period – with the reverse the case between 2011 and 2021. There is no UPC component in 2022 as until the next Census count no such adjustment can be made. It is also noted that a detailed consideration of the individual authority level contributing factors to adjustments to historic datasets by the ONS has not been undertaken as part of this study. It is recognised that those authorities which have seen the most significant changes may

explore such factors in the development of their evidence base, albeit it is recognised that the data used in this study are those published as part of official datasets.

Figure 3.6: Population component of change CCR 2001 – 2022



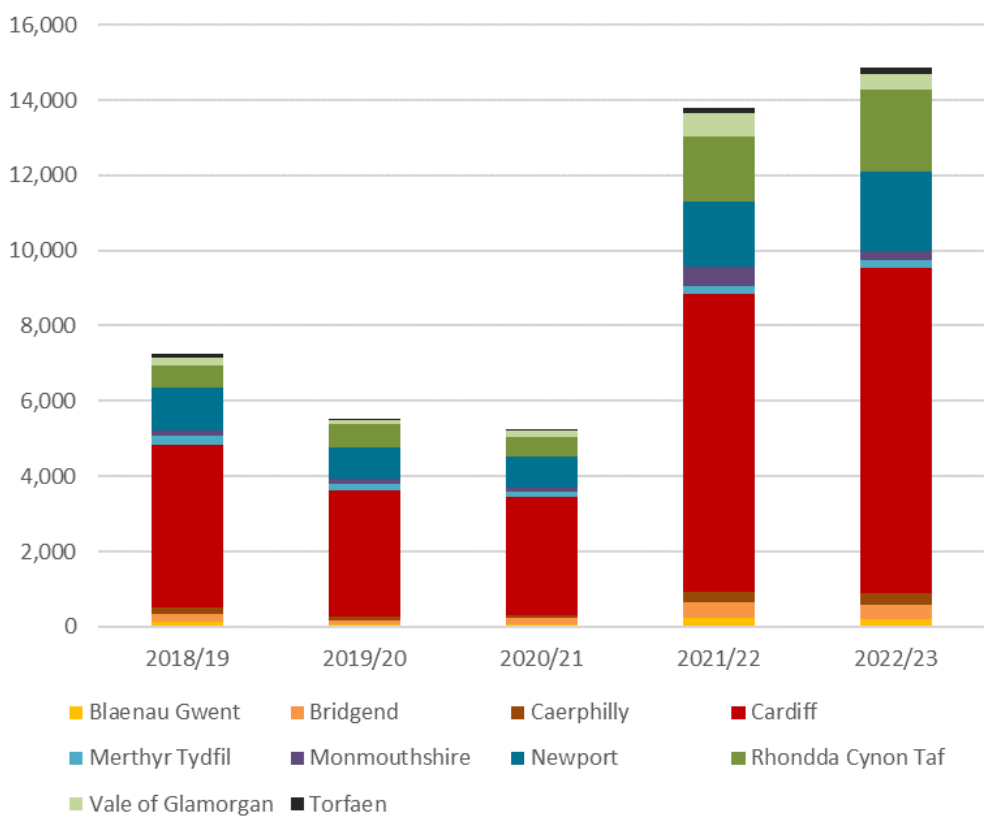
Source: ONS / Edge Analytics analysis

3.23 Up until the last three years, natural change has represented a positive contributor to growth. More recently, however, deaths have exceeded births on an annual basis, albeit with the latest year seeing almost a balanced picture. These recent changes have been driven by an increase in the number of deaths (linked to the ongoing COVID-19 pandemic) and a reduced number of births since, in line with national trends.

3.24 Migration is shown to have played a more important role in contributing to population growth over recent years, with comparatively strong net internal and international migration flows seen over the last 6 years. Prior to this, net internal migration was less significant, showing as a negative at the start of the last decade.

3.25 Looking at 2022, the main driver of population growth is estimated to be net international migration. It is important to note that this growth should be viewed in the context of a wider estimate of strong net international migration across the UK in recent years, with the ONS estimating a net increase of 672,000 international migrants in 2022/23, an increase on what was a comparatively strong growth in 2021/22 (607,000). It is understood that significant factors in this growth are increases in visas associated with work, with health and care visas for non-EU migrants, and study, with recent student cohorts understood to be staying for longer and then transitioning to work visas. Looking at National Insurance Numbers (Nino) registrations affirms the significant increase seen over the last two years, with this shown at Figure 3.7. This shows that Cardiff is by someway the most significant recipient of new international migrants, with the other authorities, with the exception of RCT and Newport, seeing very low levels of net international migration.

Figure 3.7: Nino Registrations across the CCR 2018/19 – 2022/23



Source: DWP Stat-Xplore

3.26 To assist in benchmarking the respective contribution of migration to population change, Table 3.1 shows both long-term and short-term averages for the individual components and cumulatively. UPC is specifically identified here as it is reasonable to assume, given the accuracy of births and deaths data, that a large part of this will be attributable to migration in some form.

Table 3.1: Migration historic averages across the CCR

	Long-term Average (2001/–2021/22)	5-year Average (2017/18–2021/22)
Net internal migration	2,098	4,931
Net international migration	3,137	5,771
UPC (applies 2001/02 to 2020/21 only)	-531	-3,328
Total (excluding UPC)	**5,235**	**10,702**
Total (including UPC within international migration)	4,729	8,039

Source: ONS, Edge Analytics

3.27 This clearly shows the increasing role that migration is assumed to have played in population growth in the more recent period. It is important to reference that the principal WG 2018-based projection assumes on average a net contribution of 5,095 migrants per year (2018 – 2043). This level is more closely aligned with levels seen over the longer-term and below those seen more recently. It is important to note that there is considerable uncertainty around future levels of international migration, with the UK government introducing changes to visa regulations for overseas workers and students in 2024. The aim of these changes is ultimately to reduce the level of immigration to the UK.[11]

Trend-based projections

3.28 Edge Analytics has used the information presented above to develop two variant trend-based scenarios for each of the CCR authorities. As with the official WG projections these apply several demographic assumptions, including a continuation of migration trends based upon a historical period. The two scenarios developed are distinguished by the historical period from which they derive their forward assumptions around migration:

- A Past Growth (PG) Short-term scenario: Migration assumptions drawn from a short-term (5-year) MYE history (2017/18–2021/22)
- A Past Growth (PG) Long-term scenario: Migration assumptions drawn from a long-term (21-year) MYE history (2001/02–2021/22)

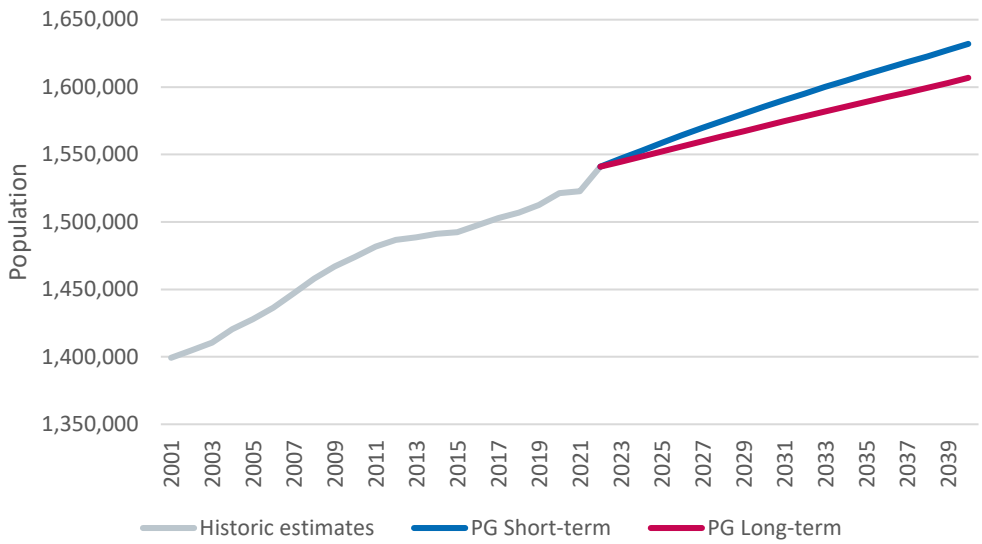
3.29 In both scenarios, the historical UPC component is accounted for within the international migration assumptions. Fertility and mortality rate assumptions have

[11] UK Parliament House of Commons Library (March 2024) Changes to legal migration rules for family and work visas in 2024.

been based on a five-year trend (2017/18–2021/22), with long-term changes to these rates drawn from the WG-2018 projections.

3.30 Figure 3.8 illustrates projected population growth in each of these scenarios.

Figure 3.8: Updated trend-based projections of population growth – CCR



Source: Edge Analytics

3.31 It is evident that both projections anticipate that the population of the CCR will grow. The long-term trend scenario projects growth of almost 66,000 people between 2022 and 2040, or circa approximately 3,370 persons per annum on average. The short-term trend scenario assumes a stronger level of population growth, sustaining more recent positive trends, resulting population growth of just over 91,000 people, or just more than 5,000 people per year.

3.32 Table 3.2 breaks down the growth projected under each scenario by authority.

Table 3.2: Projected population growth by authority under the long and short-term trend scenarios: 2022 - 2040

2022 - 2040	Past growth long-term trend scenario		Past growth short-term trend scenario	
	Population change	%	Population change	%
Blaenau Gwent	-404	-0.6%	-1,690	-2.5%
Bridgend	8,976	6.1%	7,680	5.3%
Caerphilly	2,840	1.6%	-4,443	-2.5%
Cardiff	20,065	5.4%	32,912	8.8%
Merthyr Tydfil	1,664	2.8%	-1,099	-1.9%
Monmouthshire	6,042	6.4%	6,045	6.4%
Newport	12,662	7.8%	22,875	14.2%
RCT	5,169	2.2%	8,745	3.7%
Torfaen	930	1.0%	6,704	7.2%
Vale	7,914	5.9%	13,298	10.0%
CCR Total	**65,858**	**4.3%**	**91,027**	**5.9%**

Source: Edge Analytics

3.33 Looking at the individual authorities highlights that there is a degree of variance in the comparative rates of growth. Under the long-term trend scenario, all but Blaenau Gwent are projected to see growth, but the rate of growth varies from 1.0% in Torfaen up to 7.8% in Newport. Where short-term trends are used, whilst overall the CCR is projected to see a much greater rate of population growth, it is of note that three authorities (Blaenau Gwent, Caerphilly, Merthyr) are projected to see a decline in population under these trend-based scenarios. At the other end of the spectrum though both Newport and Vale are projected to see increases of 10% or higher. It is noted that Cardiff is projected to see comparatively strong growth under both scenarios, representing a significant proportion of the overall increase in population in the CCR.

3.34 In this context it is important to understand how the projections under both scenarios could lead to modest changes in the proportional distribution of population by 2040. This is shown in Table 3.3.

Table 3.3: Contrasting the projected proportionate distribution of population under both trend-based scenarios

	2040 in Long-term trend scenario	**2022** ↓	2040 in Short-term trend scenario
Cardiff	24.4%	**24.1%**	24.8%
RCT	15.2%	**15.5%**	15.2%
Caerphilly	11.1%	**11.4%**	10.5%
Newport	10.8%	**10.5%**	11.3%
Bridgend	9.7%	**9.5%**	9.4%
Vale	8.8%	**8.7%**	9.0%
Monmouthshire	6.2%	**6.1%**	6.1%
Torfaen	5.8%	**6.0%**	6.1%
Blaenau Gwent	4.1%	**4.3%**	4.0%
Merthyr Tydfil	3.8%	**3.8%**	3.5%

Source: Turley / Edge Analytics analysis

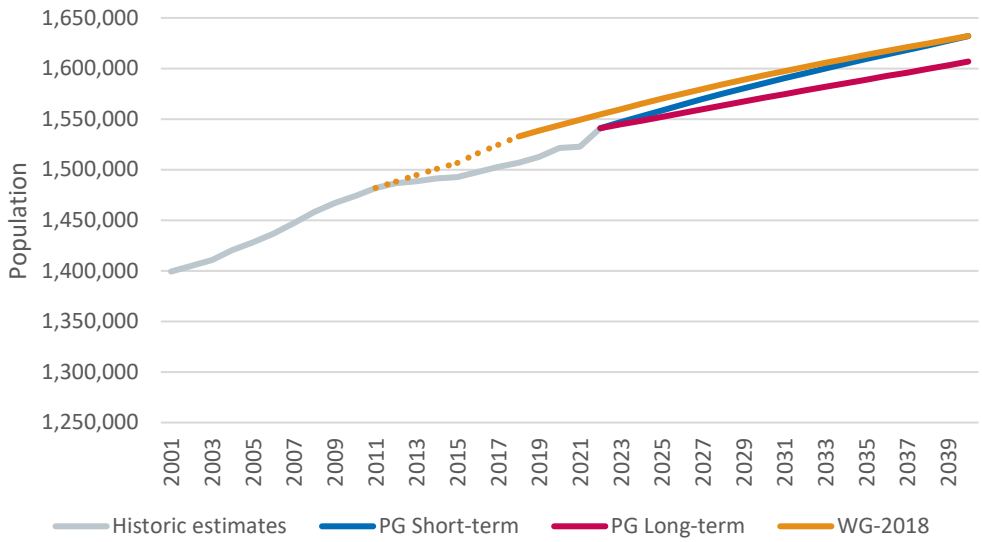
3.35 This shows under both scenarios that Cardiff, Vale and Newport see their proportionate size increase, with this most pronounced for Newport under the short-term trend scenario. Blaenau Gwent, RCT and Caerphilly in contrast are all projected to see their proportionate share in population fall under both scenarios, albeit in the case of Blaenau Gwent and Caerphilly this is less pronounced under the long-term trend scenario. The remaining authorities see a more mixed picture across the scenarios or comparatively limited changes.

The relationship with the WG 2018 projections

3.36 The 2018-based WG projections represent the last official projection of population growth. The derived 2018-based sub-national household projections are directly referenced in Future Wales, with an attributed projection of household growth provided for each of the sub-regions.

3.37 Understanding how the updated demographic data identified above relates to the official projections therefore provides an important consideration and context. It is important to observe in this regard that any such trend-projections are influenced by the historic period upon which they are based. The analysis above affirms that across the CCR the population has grown at a slower rate than anticipated by the 2018-based projections, reflected a downgrading of population growth since the 2011 Census. There has, however, been considerable variation in more recent levels of population growth driven by changes to the net migration picture. Figure 3.9 contrasts the two updated past growth trend projections with the 2018 WG (principal projection).

Figure 3.9: Projected population growth across the CCR: WG 2018-based principal projection vs updated past growth trend scenarios[12]



Source: Edge Analytics, WG

3.38 This shows that the long-term trend-based scenario projects forwards a lower level of population growth compared to the short-term trend-based projection, which suggests a higher rate of growth over the projection period. In the case of the latter this reflects the higher rates of population growth (driven by net migration) seen over the last 5 years (see Figure 3.6 above), compared to the long-term average.

3.39 Table 3.4 compares the projected annual average net migration (internal and international) under the three scenarios, reinforcing this observation.

Table 3.4: Annual average net migration assumed under the trend-based projections 2022–2040 - CCR

Scenario	Annual average net migration (2022–2040)
Past growth long-term trend	5,140
Past growth short-term trend	6,437
WG 2018-based (Principal)	5,168

Source: Edge Analytics

3.40 It is important to note that the net levels of migration exceed the total growth in population projected each year under all the scenarios. This recognises that the scenarios assume, on average, that natural change (births minus deaths) is a negative contribution to population change over the projection period.

[12] The dotted line illustrates historical population estimates, as published when the WG-2018 projection was developed, before they were revised following the 2021 Census

Summary

3.41 The analysis in this chapter has considered in detail a series of updated trend based demographic projections. These scenarios extrapolate forward potential projections of population growth using historic trends and therefore are not influenced by other potential drivers of change, such as future levels of employment opportunities, with this then considered in the subsequent sections. The analysis presented has identified:

- The 2021 Census identified that the population of the CCR had grown at a slower rate than previously estimated. This has required the ONS to adjust the previously published 2012–2021 historic mid-year estimates to account for the reduced inter-Census change. It has done this by reviewing each component in turn and adjusting where appropriate, as well as identifying a component which it labels Unattributable Population Change (UPC) that cannot be attributed to any one component. It is noted that a detailed consideration of the individual authority level contributing factors to adjustments to historic datasets by the ONS has not been undertaken as part of this study. It is recognised that those authorities which have seen the most significant changes may explore such factors in the development of their evidence base, albeit it is recognised that the data used in this study are official figures.

- Looking at the population of the CCR in 2022 affirms that Cardiff is proportionately twice the size of any of the other authorities, except for RCT. Four of the authorities (Blaenau Gwent, Merthyr Tydfil, Monmouthshire and Torfaen) have populations of less than 100,000. There are some differences in the age profile of the population of authorities with Cardiff, for example showing a more youthful population, and Monmouthshire having a much larger proportion of older age groups (65+). Across the CCR the age profile of the population has seen a general ageing.

- The CCR, whilst consistently seeing a growth in population back to 2001, has seen the pace of growth slow over the last decade. However, in the last few years, population data suggests a return to comparatively strong levels of growth, with this primarily driven by high levels of net migration. Looking at individual authorities, Cardiff, Newport and Bridgend have seen the strongest levels of growth historically. Blaenau Gwent stands out as seeing its population decline back to 2001, with trend seeing an acceleration since 2011 but then appearing to level off in more recent years.

- Edge Analytics has modelled two trend-based past growth scenarios. The first of these assumes a continuation of migration trends seen over the last five years (2017/18–2021/22) and is labelled a 'short-term' trend scenario. The second scenario assumes a longer-term trend, thereby labelled a 'long-term' trend scenario, with this drawing on a 21-year historic period (2001/02 – 2021/22). The long-term trend projects that the population of the CCR will grow by almost 66,000 people between 2022 and 2040. This is slightly lower than the growth in population projected by the 2018-based WG projection (principal variant) over a comparable time period. The short-term scenario projects a much stronger level

of population growth, seeing the CCR population increase by 91,000 people 2022–2040.

- Variant assumptions around the average levels of net migration are a key determinant in the differences presented by these projections. Where the long-term trend and the 2018-based WG projection assume a comparable level of annual average net migration (circa 5,150 per annum), the short-term trend is influenced by more recent stronger levels of net-migration and assumes a higher net migration of circa 6,400 people per annum.

- The projected growth in population varies at an authority level resulting in modest potential changes to the proportionate spatial distribution of population. Under both scenarios though Cardiff, Vale and Newport see their proportionate size projected to increase, with this most pronounced for Newport under the short-term trend scenario. Blaenau Gwent, RCT and Caerphilly in contrast are all projected to see their proportionate share in population fall under both scenarios, albeit in the case of Blaenau Gwent and Caerphilly this is less pronounced under the Past growth long-term trend scenario.

4. Estimating baseline employment growth

4.1 To inform a reasonable perspective as to the potential for economic growth across the CCR it is necessary to establish a baseline insight into how the economy is expected to change. As described in section 2 to inform this process the Commissioning Group purchased three up-to-date econometric forecasts from the leading forecasting houses.

4.2 These forecasts are considered in this section by SQW, following an overview of how the CCR economy, both employment levels and the labour-force, have changed in recent years. As with the analysis presented in section 3 the findings in this section are focussed primarily on the CCR, albeit with key spatial distribution considerations drawn out. Further analysis at an individual authority level is presented in the form of individual economic area profiles in Appendix 2.

4.3 The section concludes by identifying a reasonable scenario of baseline employment growth out to 2040 at the CCR level and with a spatial distribution.

4.4 Two caveats are worth noting at the start:

- First, while the focus of this study is on employment, aggregate job creation is not necessarily the only objective of economic strategy: indeed, CCR's *Regional Economic and Industrial Plan* places a strong emphasis on productivity, innovation and economic inclusion, all of which have implications for the value and quality of employment, as well as headline numbers.

- Second, while this section identifies a baseline scenario for employment growth, this should be regarded as indicative. There will be several economic cycles before 2040 and (as explained further below) forecasters vary in their assumptions. So, the historical view and the baseline provide a starting point for analysis, to be explored further in the next section.

Employment – Historic performance and context

4.5 In 2021, there were around 717,000 jobs in CCR, around a third of which were in Cardiff. Due to methodological changes over time, official data at local level is only available from 2009[13]. However, the forecasting houses produce their own estimates of historic job numbers, enabling a consideration of past performance over a longer period[14]. Given the volatility of recent data, focus has been placed in this sub-section on jobs performance to 2019, the last year of data before the Covid-19 pandemic.

[13] The ONS *Business Register and Employment Survey* is the key official source of employment and employee estimates at local and industrial sector level and goes back to 2009 (with a methodological change in 2015). However, as it covers businesses registered for VAT and/ or PAYE, it excludes some jobs. The *Jobs Density* dataset, also published by ONS, provides a rounded estimate of total jobs at local authority level, generally yielding a total jobs estimate higher than BRES estimated employment. The Jobs Density time series goes back to 2001, although data are only available for CCR overall from 2011.

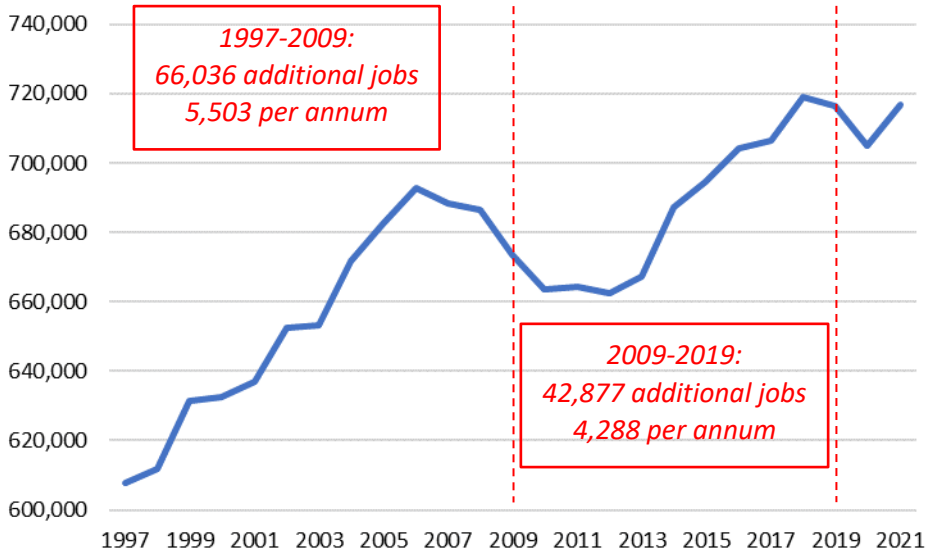
[14] Note that the historic estimates provided by the three forecasting houses do not exactly align. For ease of presentation, we have used the mean average in this report.

Overall employment growth

4.6 Taking a long-term view, CCR experienced significant economic dislocation in the second half of the twentieth century, initially through the contraction of heavy industry and later through the UK's loss of competitiveness in some lighter manufacturing sectors. Employment fell in the recession of the early 1980s, and although it recovered somewhat before the 1992 recession, numbers were largely static at the level of the region until the mid-1990s.

4.7 Employment growth was stronger from the late '90s until the financial crisis of the late 2000s. Between 1999 and 2009, total employment grew by around 42,300 (an estimated 4,226 jobs per annum). Despite a slump following the 2009/10 recession, labour demand rebounded strongly, with an additional 4,288 jobs per annum created in 2009-19. Total employment has also risen since the pandemic:

Figure 4.1: Total employment, CCR, 1997-2021



Source: Experian, Cambridge Econometrics, Oxford Economics; SQW analysis

4.8 A similar pattern of steady employment growth punctuated by the financial crisis and its aftermath is visible across the UK. However, overall UK growth was stronger, with a compound annual growth rate (CAGR) between 1999 and 2019 of 0.9%, compared with 0.6% regionally. The differential in growth rates was mainly accounted for in the second half of this period, with more rapid UK growth following the recession.

4.9 Within the region, employment grew faster in Cardiff than elsewhere, with a 20-year CAGR of 1.3%, compared with 0.6% regionally. Consequently, Cardiff's share of total regional employment has grown over time: from 29% in 1999, to 32% in 2009 and 33% in 2019. Despite contraction in the early 2000s, Newport has also seen relatively strong growth more recently (with a CAGR of 1.0% in 2009-19).

4.10 In contrast, Blaenau Gwent, Torfaen and the Vale of Glamorgan saw a net loss of employment over the 20-year period, although in the case of the latter two, this was mostly accounted for by losses in the early 2000s.

Table 4.1: Historic employment change, 1999-2019

	Est. employment (2021)	Change (jobs per annum)		
		1999-2009	2009-2019	1999-2019
Blaenau Gwent	**21,050**	-273	-13	-143
Bridgend	**63,500**	1,076	-29	523
Caerphilly	**62,800**	315	410	362
Cardiff	**238,800**	3,191	2,046	2,618
Merthyr Tydfil	**25,100**	412	46	229
Monmouthshire	**42,600**	454	269	362
Newport	**85,400**	-196	816	310
RCT	**90,700**	68	235	151
Torfaen	**39,500**	-327	160	-83
Vale	**47,300**	-494	350	-72
CCR	**716,900**	4,226	4,288	4,257

Source: Experian, Cambridge Econometrics, Oxford Economics; SQW analysis

Sectoral change

4.11 Looking across the major industrial sectors, the early years of the millennium saw a sharp decline in manufacturing employment. In 1999, manufacturing accounted for around 19% of all jobs in the region (a share of total employment that had been more or less constant since the early 1980s). By 2009, its share had fallen to 11%, with a net loss of about 45,000 jobs and substantial contractions in those local authority areas (such as Blaenau Gwent, Caerphilly, Rhondda Cynon Taf and Torfaen) which had historically been the most dependent on manufacturing for employment. Manufacturing employment continued to fall in the following decade, although at a much slower rate.

4.12 It should be noted that while some of the contraction in manufacturing employment was linked with an absolute loss of employment (including within some very 'high-profile' sectors, such as the steel industry in Newport at the start of the 2000s and Ford at Bridgend at the end of the period), it was also linked with productivity gain. Between 1999 and 2019, CCR's real-terms manufacturing gross value added grew faster than all-industries GVA, with the consequence that the manufacturing share of total regional output was actually higher in 2019 than it was twenty years previously[15]. Manufacturing therefore remains an important part of the regional economy, despite its falling share of employment, with the implication that increasingly, demand in the sector is likely to be for fewer, but 'higher-value' jobs.

[15] ONS (2023), Regional gross value added (balanced) by industry. Manufacturing accounted for 14% of total regional GVA in 1999 and 15% in 2019.

4.13 Employment losses in manufacturing have been offset by gains in:

- Financial, professional and business services, which saw growth of around 41,700 jobs between 1999-2019 (i.e., almost offsetting the manufacturing loss). Almost half of this growth was in Cardiff, which has consolidated its position as an important regional professional services centre. Within this broad sector, the strongest employment growth was in professional, scientific and technical services and real estate. Financial services grew more slowly and experienced a slight contraction in the later years of the period.

- Information and communications, a relatively small sector, but which saw sustained growth over the period (CAGR of 2.7% over 20 years)

- Public services, especially in health and social care-related activities. Public administration also saw strong growth in the early 2000s, although overall employment fell in the context of austerity after 2010.

- Accommodation and food service and arts, entertainment and recreation, especially in 2009-2019

4.14 Wholesale and retail activity also saw strong growth over the 20-year period, with some 9,000 more jobs in 2019 compared with 1999. However, most growth occurred in the early part of the period, followed by a contraction in later years, reflecting structural changes in the retail industry.

4.15 Overall, the picture has been one of a continued transition from an industrial to a service-based economy. While local patterns vary, there is a link between the spatial and sectoral dynamics of employment growth, with (broadly) stronger overall jobs growth in those places with economies more oriented to growing service-based sectors. This is considered in greater detail in relation to potential future growth in Section 5.

Understanding the labour-force

4.16 This research is primarily interested in assessing and understanding the inter-relationships between the future employment growth prospects of the CCR and its implications for migration and therefore changing population.

4.17 Labour-force behaviours represent the key linkage between the availability of jobs in the CCR and the resident workforce. This sub-section therefore provides an overview of the current labour-force and an understanding of how it has changed over recent years.

4.18 The latest data (APS) suggests that the resident labour-force (employees and self-employed) within the CCR stands at approximately 723,000 persons as at Jan-Dec

2023[16]. Figure 4.2 shows how this resident labour-force is distributed across the ten authorities.

Figure 4.2: Spatial distribution of the resident-labour force across the CCR, Jan-Dec 2023

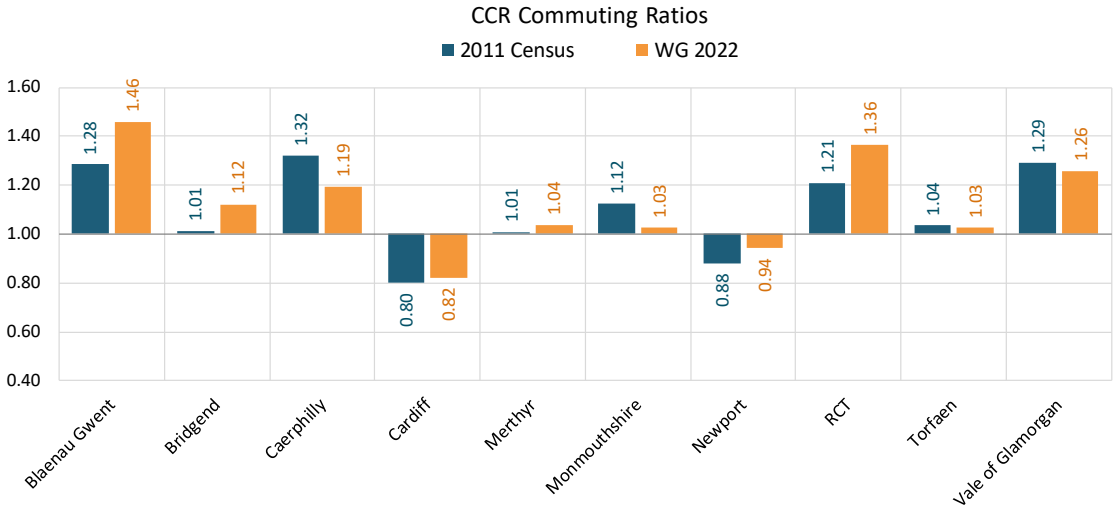
	Employees	Self-employed	**Total**
Blaenau Gwent	28,900	1,700	**30,600**
Bridgend	54,800	6,900	**61,700**
Caerphilly	81,500	4,700	**86,200**
Cardiff	171,800	20,500	**192,300**
Merthyr Tydfil	25,100	3,200	**28,300**
Monmouthshire	37,600	5,900	**43,500**
Newport	65,000	4,700	**69,700**
Rhondda Cynon Taf	94,600	10,300	**104,900**
Torfaen	40,400	3,400	**43,800**
Vale of Glamorgan	56,900	5,400	**62,300**
CCR	**656,500**	**66,700**	**723,200**

Source: APS, SQW analysis

4.19 Where the above has considered both workplace-based employment and residence-based labour-force it is important in the context of this research to recognise that the two are bridged by commuting flows. It is acknowledged that the 2021 Census has potential limitations as a source of information on commuting as it was conducted during the Covid pandemic, which requires care to be taken in its use. In this context analysis has been undertaken of the commuting data published by the WG for individual authorities (based on ONS Annual Population Survey (APS) data), benchmarking the latest data for 2022 against the 2011 Census in Figure 4.3. This suggests that at the CCR level there is a modest net out-commute with a ratio of 1.04, meaning that an estimated circa 30,000 residents net commute out of the city region and work elsewhere.

[16] It is noted that this figure differs in the POPGROUP modelling where it is an output of the application of labour-force assumptions to the projected population

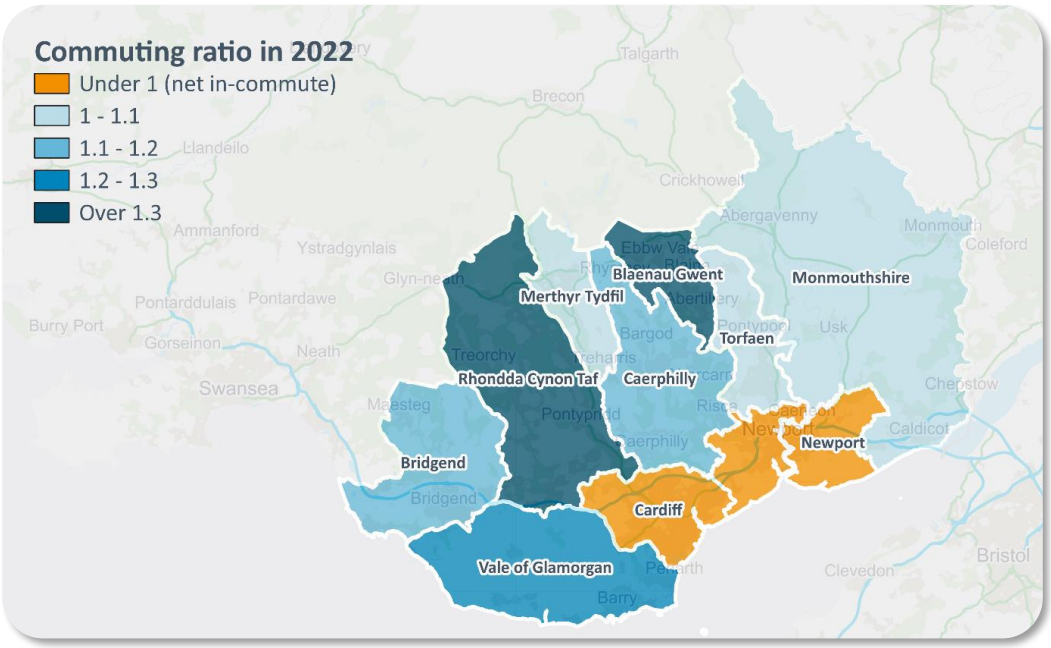
Figure 4.3: Commuting rates across the CCR



Source: WG 2022, ONS.

4.20 The above suggests that there have been some changes in commuting flows back from 2011. More notable changes are evident in Blaenau Gwent which has seen its rate increase quite significantly, meaning that a greater proportion of its labour-force commutes out for work. RCT has also seen a quite notable increase, with Bridgend also recording an increase. In contrast, Caerphilly, the Vale and Monmouthshire have seen rates decrease, therefore increasing levels of self-containment within each. It is of note that only Cardiff and Newport are net importers of labour, with this shown spatially at Figure 4.4.

Figure 4.4: Spatial distribution of commuting flows



Source: WG 2022

4.21 In considering the balance between jobs and population the existence of a potential latent labour-force is also important alongside an understanding of how this could change. It is the case that labour-markets across England and Wales have become increasingly tight because of employment growth outpacing demographic growth. This is exemplified when looking at current unemployment rates, as shown at Table 4.2, which shows the latest 2023 estimates.

Table 4.2: Unemployment rates – CCR authorities

Authority	Unemployment rate (2023)
Blaenau Gwent	3.9%
Bridgend	3.2%
Caerphilly	3.4%
Cardiff	4.0%
Merthyr Tydfil	3.9%
Monmouthshire	2.4%
Newport	4.3%
RCT	3.4%
Torfaen	3.3%
Vale	2.8%

Source: ONS model-based estimates of unemployment (APS, 2023)

4.22 Whilst there is limited variation across the region, Monmouthshire is notable in having a comparatively low rate at 2.4%, with this likely to be related to the smaller size of its working age population, as considered in section 3. Newport has the highest rate at 4.3% but it is noted that rates across each of the authorities are relatively low when set in the context of historic averages back over the last ten years. Where there are uncertainties around wider economic performance, considered below, in the context of the ageing populations noted it is reasonable to assume that rates will continue to be low on average over a longer-term period.

4.23 Economic activity rates of those of working age are another important consideration. These evidently vary by gender and age-group, reflecting the relationship with work at different stages of a person's life. As with commuting, information from the 2021 Census, which would usually represent an important statistical benchmark, is recognised as requiring careful consideration. This recognises that the collection of data was undertaken in the midst of a pandemic, which impacted significantly on working behaviours. Detailed analysis has been undertaken to explore what the Census data suggests, benchmarking this against more recent and contemporary APS data, albeit recognising this itself has notable limitations where it is based on a sample as opposed to a national survey. This having particular implications for those authorities whose populations are smaller in size. In considering these datasets several observations were made:

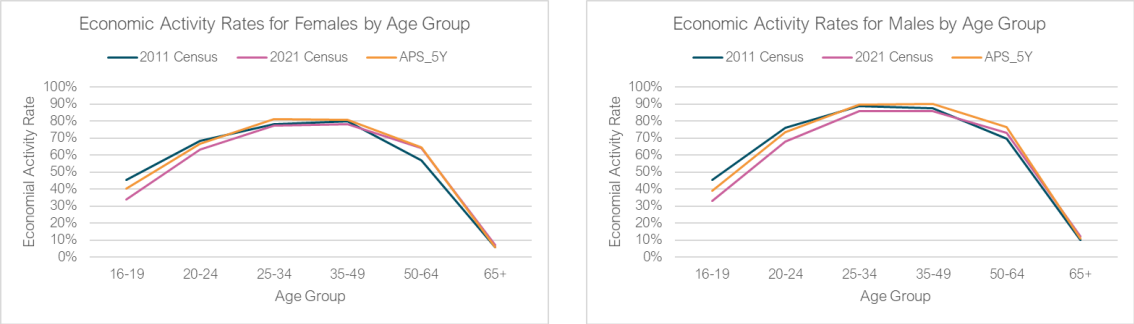
- The 2021 Census suggests that greater proportions of older cohorts in the labour-force are staying economically active to those seen in the 2011 Census. This is particularly true of women.

- The 2021 Census suggested that economic activity rates of younger cohorts, in contrast, had reduced. Looking at more recent APS data, however, challenged the extent to which this had continued to be the case with younger cohorts appearing to see a positive recovery, whilst recognising that changes to the school leavers age will also potentially have had wider impacts in reducing activity rates in this cohort.

- Across core-working age groups of both genders both datasets continued to show comparatively strong rates of economic activity, as would be expected. This is also mirrored within APS data.

4.24 These trends are broadly shown in Figure 4.5, which presents activity rates under both Census figures across CCR and average rates drawing from the APS (2018 – 2023).

Figure 4.5: Economic activity rates by gender and age 2011 vs 2021 Census



Source: 2021 Census / APS / Edge Analytics analysis

Forecasting baseline future employment growth

4.25 To provide a 'starting point' for considering future employment growth to 2040, three baseline forecasts are compared, from Cambridge Econometrics, Experian and Oxford Economics. These are based on UK-level data, disaggregated by industry and region and provide forecasts of future employment by high-level sector and local authority. All three forecasts were purchased in late 2023 and took account of the recovery from the Covid-19 pandemic and the impact of recent international events, including the war in Ukraine and the consequent energy crisis[17].

4.26 The three forecasts each incorporate different assumptions regarding future economic growth. They are also published at different points in the year, so will each take account of slightly different data sources. In the short term (through to 2025), there is no consensus between the three forecasts, reflecting current uncertainty[18].

[17] Although not the current crisis in the Middle East as it has developed since October.

[18] Experian projects a short-term contraction in employment in 2022-25; Oxford Economics and Cambridge Econometrics both anticipate growth.

4.27 However, in the longer term, there is greater alignment. Between 2025 and 2040, the three forecasts anticipate growth of between 1,773 and 3,023 jobs per annum, with an average of 2,439. Consistent with forecasts elsewhere, Oxford Economics' projections are the lowest of the three (partly understood to reflect input demographic assumptions within the Oxford model), although all anticipate substantially slower baseline growth than the 1999-2019 historic trend:

Table 4.3: Baseline forecasts

Forecaster	Jobs per annum (2025-40)
Cambridge Econometrics (April 2023)	3,023
Experian (September 2023)	2,520
Oxford Economics (December 2023)	1,773
Average	2,439

Source: Cambridge Econometrics, Experian, Oxford Economics

4.28 Taking the average of the three long-term forecasts and applying this to the 2022-40 period (i.e., smoothing out the short-term volatility in the forecasts) gives total employment growth of 43,895. This is used as a reasonable baseline, although it is, of course, indicative for the reasons noted at the start of this section.

4.29 Using the average of the forecasts, Table 4.4 illustrates the baseline distribution of employment growth across the region's local authorities. Reflecting the historic trend (albeit at a lower level), forecast growth is highest in Cardiff and Newport, and lowest in Blaenau Gwent (which shows a small contraction), Caerphilly and Torfaen. Consequently, Cardiff's share of total regional employment continues to rise within the baseline forecast, to around 35% by 2040. This broad picture is reflected in all three of the forecasts, although Oxford Economics anticipate a greater variance in growth trajectories between the local authorities.

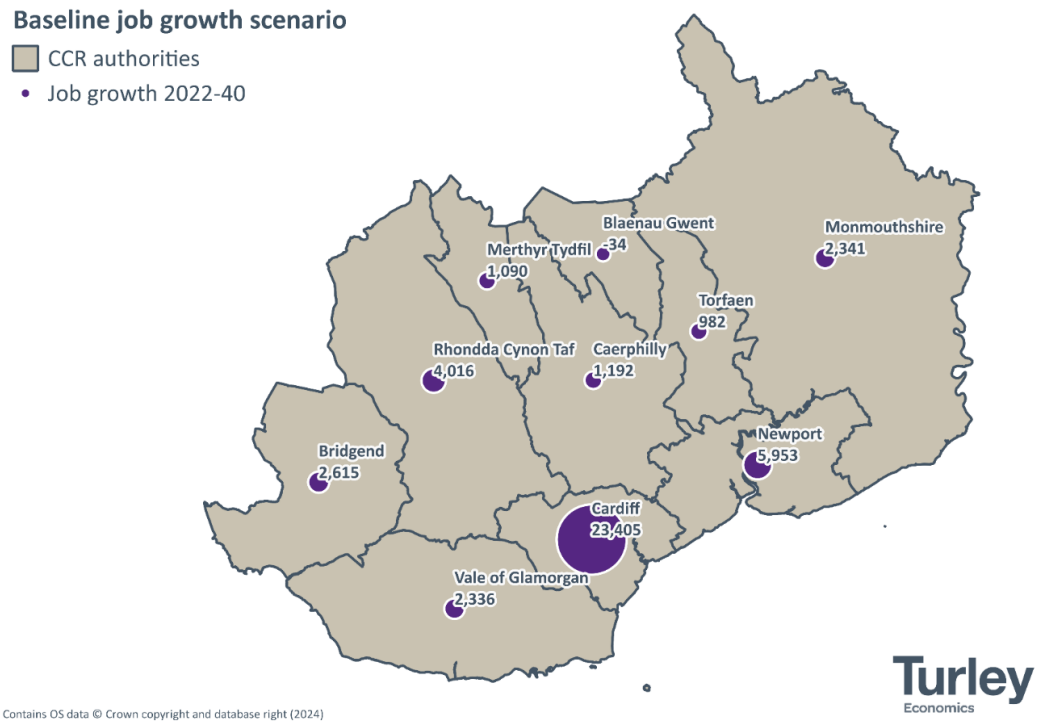
Table 4.4: Baseline employment growth, 2022-40 (based on average of forecasts)

Authority	Additional jobs	Jobs per annum	CAGR
Blaenau Gwent	-34	-2	-0.01
Bridgend	2,615	145	0.22
Caerphilly	1.192	66	0.10
Cardiff	23,405	1,300	0.50
Merthyr Tydfil	1,090	61	0.23
Monmouthshire	2,341	130	0.29
Newport	5,953	331	0.37
RCT	4,016	223	0.24
Torfaen	982	55	0.13
Vale of Glamorgan	2,336	130	0.26
CCR	**43,896**	**2,439**	**0.32**

Source: SQW analysis of baseline forecasts

4.30 Figure 4.6 illustrates this distribution across the region:

Figure 4.6: Forecast baseline jobs growth by authority within the CCR



Source: SQW analysis

4.31 Breaking the baseline forecasts down by broad sectoral group, there is a further anticipated decline in manufacturing employment, offset by growth in services:

Table 4.5: Baseline employment growth by high-level sector, 2022-40

Sector	Additional jobs	Jobs per annum	CAGR
Manufacturing	-12,156	-675	-1.04
Construction	2,841	158	0.36
Transport & storage	1,783	99	0.39
Wholesale & retail	2,954	164	0.17
Information & comms	2,393	133	0.49
Financial, prof & business services	18,398	1,022	0.63
Public services	16,446	914	0.40
Other	11,236	624	0.57
Total	**43,896**	**2,439**	**0.32**

Source: SQW analysis of baseline forecasts

4.32 It should be noted that there is quite a wide divergence between the three forecasting houses in their expectations of sectoral change. While all three anticipate contraction in manufacturing, Oxford Economics anticipates the scale of this to be *three times* greater than Experian or Cambridge Econometrics. Oxford also anticipates stronger growth than the other two in finance, professional and business services.

4.33 Local employment land reviews and related studies prepared by individual authorities have, in many cases, used different historical iterations of the forecasts generated by one of the three forecasting houses used to inform this research. These are considered in the local authority level analysis in Appendix 2. Together with the forecasts used above, they highlight the extent to which future projections vary between forecasting houses and according to the year of commission and illustrate the need to triangulate forecast data with other sources of intelligence.

Summary

4.34 The analysis in this section has identified:

- Despite significant long-term challenges, the CCR economy has performed well in employment terms in recent years. It saw strong growth in employment from the late 1990s to the financial crisis, with the economy coming close to accommodating 700,000 jobs by 2006. Following recession, the economy recovered to surpass this level of jobs in the 2010s, with were over 716,000 jobs in the CCR in 2019. Over the decade 2009 – 2019 a compound annual growth rate (CAGR) of 0.62% was achieved on average, broadly consistent with the 20-year growth rate. Since the pandemic, the economy has continued to create jobs.

- Growth of around 4,250 jobs per annum in 1999-2019 has been driven by professional and business services and by public service activities, especially in healthcare. There has also been growth in information and communications and in accommodation and food service. However, this growth has been partially offset by a contraction in manufacturing, which was especially sharp in the early 2000s. Historic growth has been strongest in Cardiff and (more recently) Newport, with Cardiff's share of employment gradually increasing over time.

- Strong employment growth, albeit recognising the different cycles associated with growth, recession and recovery, has had implications for the labour-force. Currently it appears that the labour-force is well utilised with unemployment levels being consistently low and evidence of strong economic activity rates across core-working ages. The authorities of Monmouthshire and the Vale are notable in having low rates of unemployment, suggesting comparatively tight labour-markets. There is evidence that the economic activity rates of older cohorts of the workforce, particularly females, have continued to increase since 2011. There is less certainty regards the activity rates of younger people, where there is some suggestion that rates have reduced from those seen over the same period of time, with this cohort particularly impacted by the pandemic and changing aspirations around studying.

- There are evident geographical relationships between the location of employment and resident labour. Across the CCR Cardiff and Newport are significant importers of labour, particularly in the case of Cardiff. This reflects the concentration of jobs in both. In contrast RCT and Blaenau Gwent are significant exporters of labour. Given the size of the labour-force in RCT the scale of the flow is very significant with a large proportion of labour in the authority servicing jobs in Cardiff. The same is also true, albeit to a lesser extent in the Vale where it also has a high rate of out-commuting. Overall, it is important to observe that the CCR is a net exporter of labour, even with the strong pull of employment within Cardiff and Newport. This reflects the fact that there are strong transport routes to other employment centres outside of the CCR, including Swansea / NPT to the west and Bristol / South Gloucestershire to the east into England.

- Analysis of up-to-date forecasts from three of the leading forecasting houses confirms that there is a reasonable expectation that the CCR will continue to create new employment opportunities. An average of the three forecasts suggests job growth of close to 2,500 jobs per annum, representing a reasonable baseline position out to 2040. This level of job growth is more modest than that recorded historically.

- The baseline forecast, which as noted above is based on an average of the three forecasts used in this study, suggests that, except for Blaenau Gwent, all the authorities will see an increase in employment between 2022 and 2040. It is acknowledged that where an average has been preferred the forecasts do provide a broad range of potential employment change at an authority level.

- In considering the comparative scale of growth between authorities the baseline position continues to suggest that Cardiff and Newport will see stronger rates of

growth to other parts of the CCR which would see their share of total jobs in the region increase.

- Sectorally, the baseline forecast suggests a continued decline in manufacturing employment, offset by growth in business, professional and public service activities.

- It is observed, however, that while the baseline is a model-based extrapolation of UK-wide trends and assumptions, it does not take account of specific local growth opportunities or identified planned investment. These are considered further in the development of a 'higher potential jobs growth scenario' in Section 5.

5. Considering economic strategy and investment

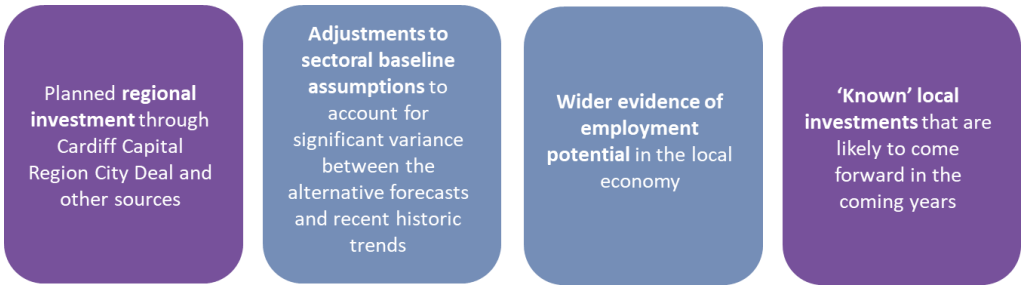
5.1 While the baseline employment scenario set out in Section 4 indicates scope for jobs growth over the long term, it is based on a series of economic forecasting models, rather than an analysis of local growth potential. In accordance with the study objectives, this section therefore considers the scope for further employment growth above the baseline accounting for the latest available local economic information supplied by individual authorities and the CCR.

5.2 Rather than using an econometric model resulting in an alternative forecast, the approach adopted seeks to build a future growth 'narrative', This aims to establish whether, and to what extent, there is a plausible pathway to future jobs growth to 2040 and how this might be distributed at local authority level. This seeks to consider historic trends and indications of future investment based upon an interpretation of the information provided. This then informs a 'higher potential jobs growth scenario', the demographic implications of which are considered in Section 6.

5.3 In building the growth narrative, the research has sought to triangulate:

- Evidence of regional strategy and major investments that are coming forward at regional level (including those associated with the CCR City Deal)
- Evidence of significant 'known' local investments and other growth opportunities
- Further analysis of historical trend and forecast data at local level (including material prepared for local employment and reviews and other studies) to consider growth in specific sectors and localities.

Figure 5.1: Assimilating information of potential employment additionality



Source: SQW

5.4 In developing the growth narrative, three points are important to consider:

- First, to support a high-level regional study, evidence has been drawn from secondary sources and from discussions with the planning policy and economic development teams within the local authorities. It has not involved consultation with investors, agents and other actors, nor has it involved an analysis of physical capacity for employment growth. So, while it draws on material prepared for employment land reviews and other local studies, it has not involved *new* research at this level of granularity.

- Second, the focus is on *positive* opportunities for growth above the baseline. It is acknowledged that there will also be examples of disinvestment: some of these could have significant consequences, although they are hard to foresee with any level of robustness.

- Third, potential job numbers referenced in the 'higher potential jobs growth scenario' should not be seen as reflecting policy. The concluded levels of job growth are therefore presented as essentially being 'policy-off'. Local authorities may have strategic aspirations for higher or lower levels of job growth, informed by a wider range of evidence as the economic and policy context evolves.

5.5 The growth narrative has been substantially built from the 'bottom up', considering the opportunities and evidence within each local authority. Further detail for each component authority is therefore contained in a series of local narrative papers in Appendix 2.

Regional economic ambitions

5.6 As noted in Chapter 1, *Future Wales* defines most of CCR as part of the Cardiff, Newport and the Valleys National Growth Area. The narrative in *Future Wales* reflects both a recognition of existing investment (and the opportunity for more), and the need for regeneration. Specifically, *Future Wales* acknowledges support for *"Cardiff's status as an internationally competitive city and a core city [and]… the primary national centre for culture, sport, leisure, media, the night time economy and finance; … an increased strategic role for Newport as a focus for sustainable, long-term growth and investment; … [and] co-ordinated regeneration and investment in the Valleys area"*[19].

5.7 Within Cardiff Capital Region, partners adopted a *Regional Economic and Industrial Plan* (REIP) in 2019. This aimed to *"make the CCR one of the most investable regions in the UK",* containing a strong focus on raising productivity through innovation-led growth. The REIP was refreshed in 2023, with the new Plan setting an ambition to be *"a proud Cardiff Capital Region, where everyone is connected locally and globally, enjoying work, business and life opportunities that make us the place to fulfil potential"*[20].

5.8 The REIP seeks to address four key challenges, defined as tackling economic disparities and boosting growth; enabling innovation capability and capacity; improving physical and digital infrastructure; and decarbonising the economy by 2050. Within these overall themes, there is an emphasis on productivity and innovation (reflecting a focus on the quality and value of employment, rather than aggregate job numbers, albeit in the light of the 25,000 jobs target) and on *"doing fewer things better"*, concentrating resources on a limited number of priority areas where there are distinct regional advantages.

[19] Welsh Government (2021), *Future Wales: The National Plan 2040*, Policy 33

[20] CCR (2023), *Regional Economic and Industrial Plan 2023-28*

Regional sectoral priorities

5.9 In this context, the REIP has a focus on building capabilities in five priority 'clusters', in which there are opportunities for growth. These are defined as:

- **Fintech**, including a number of existing financial services companies (such as Admiral and Principality), as well as new investors in the region (e.g., Starling Bank and PwC), and locally-based technology businesses[21]. It is hard to accurately measure the size of the fintech sector, since there is no established SIC code definition. However, in 2022, finance and insurance employed around 27,000 people in CCR (63% of whom were in Cardiff). There has been relatively strong sector growth in recent years, and the most recent data indicates that the sector has high representation relative to the rest of the UK, with a location quotient of 1.3[22].

- **Medtech and life sciences**. Historically, South Wales has had strengths in pharmaceuticals and medical device manufacturing. The company stock is quite widely distributed around the region, and includes larger external investors (e.g., BBI Solutions and PCI) as well as technology companies linked with the university base. Total life science employment is quite small (around 5,000 employees in 2022, although with growth over time), although the number employed in areas such as digital health and the application of technology in the Health Service will be substantially greater. Key potential investments within the region include the development of the Cardiff Edge life sciences R&D site at Coryton, and the proposed Medi-Park adjacent to the new Grange University Hospital in Cwmbran.

- **Compound semiconductors**. Especially centred on Newport and linked with Cardiff University's capabilities, there is a concentration of advanced semiconductor businesses in the region which has expanded since the 1970s. These include Nexperia (recently acquired by Vishay Intertechnology), IQE and KLA, with Newport also hosting the national Compound Semiconductor Applications Catapult. Direct employment is estimated at around 1,600 FTE[23], and the sector has been subject to some significant public sector investments in recent years.

- **Cybersecurity**. This is a relatively small sector (estimated at consisting of about 70 companies in Wales[24]), although cybersecurity applications are ubiquitous and cross-sectoral. Key regional assets include parts of the manufacturing sector (e.g., Airbus at Newport and Thales at Ebbw Vale), PwC's cybersecurity operation at Cardiff and academic capabilities at Cardiff University and the University of South Wales.

- **Creative industries**. Long recognised as a regional strength, with the BBC anchoring a major broadcast and production industry around Cardiff, a strong relevant university presence and a series of major sector development

[21] Fintech Wales (2023), *Annual Report 2022/23*

[22] ONS, BRES.

[23] Max Munday, Robert Huggins and Annette Roberts for UKRI/ CSConnected (2022), *Annual Report: Compound Semiconductor Cluster in South Wales*

[24] CCR

programmes (including the former Clwstwr R&D programme and, currently, Media Cymru).

5.10 As these sectors do not have standard definitions, establishing total employment is quite challenging, although approximated SIC codes and the bespoke definitions referenced above suggest in the region of 45,000 jobs, which would equate to about 6% of the total employment stock. While this is relatively small, the long-term growth opportunity relates in part to the potential for connections between sectors (for example, the scope for compound semiconductor applications in medtech) and for spillover effects into the wider economy (e.g., the extent to which the wider manufacturing base might be impacted by the adoption of innovative technologies).

5.11 Beyond these stated sectoral priorities, opportunities are also highlighted in relation to **industrial decarbonisation**. To some extent, these are likely to be reflected in other parts of the country. However, the ports operator ABP has recently published 'masterplans' for Barry and Newport with the intention of supporting renewable energy production linked with industrial development[25].

Strategic regional investments

5.12 There is currently a substantial programme of public investment in initiatives to support economic growth. This includes:

- The development of the **South Wales Metro,** a transformational programme, involving improvements in the quality, frequency, and reliability of the Valley Lines rail network, as part of a modern and integrated regional transport system. Key routes to additional employment impacts include the role of the Metro Central scheme in bringing forward a series of major city centre sites in Cardiff, and the prospect of opening up additional employment space around key rail interchanges.

- The Cardiff Capital Region **Wider Investment Fund**, a £495 million package of investment in innovation capacity and infrastructure. This includes a substantial completed investment in the compound semiconductor cluster, as well as a series of funds to support investments in innovative businesses and to bring forward strategic sites, and long-term plans for the redevelopment of the former Aberthaw power station as a green energy park.

- The new **Cardiff-Newport Investment Zone.** This is a £160 million package of site-based tax incentives and infrastructure investment designed to attract higher value employment and innovation, with an industrial proposition oriented to the compound semiconductor sector.

- Strategic **Welsh Government** investment, including the Enterprise Zone sites at Bro Tathan in the Vale of Glamorgan and at Ebbw Vale and the Brocastle strategic employment site at Bridgend. Major Welsh Government transport investment in completing the dualling of the A465 Heads of the Valleys road is also important in

[25] See ABP (February 2024), *Future Ports: Newport*

bringing forward employment opportunities in the north of Rhondda Cynon Taf, Merthyr Tydfil, Caerphilly and Blaenau Gwent.

- The **UK Shared Prosperity Fund**, worth £236 million to CCR, complementing the Wider Investment Fund and other funding streams.

5.13 Addition of the employment potential of regional investments supported by CCR and other public sources suggests scope for around 1,600 jobs per annum over the baseline across the region. This is not necessarily 'additional' to the baseline (since there has been public investment in economic development in the region for many years, and it might reasonably be expected that this would continue in any scenario), but it does indicate that there is a pathway to additional employment growth.

Local opportunities

5.14 These regional investments have been considered alongside other local growth opportunities and evidence within each of the ten local authorities to inform a series of local narratives. These are summarised below and set out in greater detail in Appendix 2. In each case, there is considered to be a reasonable route to employment growth above the baseline, based on known or likely investments or the plausible continuation of historic trends at a local level.

Table 5.1: Significant growth opportunities by local authority

Authority	Opportunities for growth
Blaenau Gwent	• Perceptions of relatively strong small and micro business growth (perhaps at variance with the negative baseline outlook) • Continuing evidence of industrial demand, with scope for diversification of the industrial base • Improved connectivity via A465 a key locational advantage (likely to be augmented further as remaining sections of A465 improvements completed • Major areas for expansion linked with strategic sites in the Ebbw Vale Northern Corridor and at The Works, reflecting continuation of the Tech Valleys vision • Continued CCR investment such as the £50m Northern Valleys Initiative to invest in infrastructure and encourage private sector growth
Bridgend	• Some significant 'shocks' in recent years – e.g., Ford, more recently Zimmer Biomet, potential supply chain consequences of restructuring at Port Talbot • However, evidence of strong industrial demand, albeit from a more diverse and SME-oriented market than historically – challenges in balancing *current* demand with drive to secure investments in 'priority' sectors • Major strategic sites clearly articulated – Bridgend Industrial Estate, Brocastle, Waterton, the former Ford site and Pencoed

	Technology Park, with current Economic Development Strategy assessment of scope to accommodate up to 7,500 jobs
Caerphilly	• Reported strong enquiries, especially for industrial space, but constrained by shortage of supply. But evidence of refurbishment/ subdivision of older stock coming forward commercially, especially in mid and south of the county • Investment in infrastructure coming forward to support further development at Oakdale, for which demand considered robust • Likely significant benefit from Metro, although considered likely to be principally a resident benefit (outbound commuting) than a location driver. However, important town centre investments coming forward, e.g., Caerphilly Interchange
Cardiff	• Major schemes coming forward focused on: ➢ Cardiff Central Enhancement Programme (CCEP**)**, focused on bringing forward a series of major sites, linked with Metro Central ➢ Atlantic Wharf masterplan and redevelopment of industrial land to SE of city centre ➢ Cardiff East Parkway/ Hendre Lakes, with significant employment potential ➢ Cardiff Edge (likely 'higher-value' linked with CCR priority sectors, rather than employment volume) • Reported demand from tech-related occupiers and increasing demand for warehouse and light industrial space
Merthyr Tydfil	• Key driver location and accessibility to A465 and A470, although most growth seen as indigenous • Indications of a nascent presence in creative arts and technology – likely relatively small in overall employment terms, but scope for organic growth • Anticipated growth in hospitality/ tourism/ evening economy, geared to development of masterplan for the town centre.
Monmouthshire	• High proportion of micro businesses (as elsewhere, but with relatively high business density), driving demand for space, especially around Monmouth and south of the county. • Growth in professional services/ home working activity, linked with connections to larger centres (inc. Bristol) • Some recent disinvestments (food manufacturing at Abergavenny, distribution at Magor). Prospects for investment on these sites seen to be positive, although inward investment enquiries relatively subdued.
Newport	• Prospects for future growth seen as positive, linked with major opportunities including: ➢ Expansion of the compound semiconductor cluster

	➢ Growth in 'tech' sector more generally – c.f., tech incubator in Newport city centre, established institutions such as Alacrity, scope for growth in cybersecurity ➢ Wider opportunities in the city centre, including Knowledge Quarter and Northern Gateway ➢ Regeneration of Newport Docks, although ABP's plans currently at relatively high level • Augmented by Investment Zone, although details and potential economic impact still to be developed
RCT	• Significant divergence between different parts of the county: high demand in south along M4 corridor, relatively weak in Rhondda; 'mid-way' in Cynon • Major opportunities including: ➢ Coed Ely ➢ Strategic site at Hirwaun, benefiting from HotV investment (and potential Metro) • Scope for redevelopment on major existing employment sites at Treforest and Llantrisant • RCT will be a major beneficiary of Metro, but effects "difficult to gauge" in terms of attracting additional employment • Vacancy rates on existing stock generally low. But poor quality often a drive to disinvestment and obsolescence, esp. in Rhondda and where infrastructure is weak
Torfaen	• Weak baseline forecasts, but these are seen as at variance with levels of investment enquiries and the good connectivity that the county offers, especially around Cwmbran. Generally, demand constrained by a lack of available stock • Principal focus of demand (and need for future supply) at Cwmbran and south, especially linked with manufacturing and links to technology sector around Newport • Area around East Cwmbran and Grange University Hospital also remains a strategic location for potential higher value uses
Vale of Glamorgan	• Very substantial growth opportunities linked with major sites, including: ➢ Aberthaw, recently acquired by CCR (although job estimates not yet known) ➢ Cardiff Airport and Bro Tathan Enterprise Zone ➢ Land adjacent to Renishaw site (J34) intended for development of supply chain activities ➢ Hydrogen/ green energy opportunities at Barry Docks

Source: SQW

5.15 Across the region, local authority partners (and wider stakeholders consulted as part of local employment land studies) also considered that there was generally high demand

from small and micro businesses, which in some cases was frequently greater than supply.

Potential future employment growth across CCR

5.16 Based on the review of regional investments, local opportunities and local evidence base material, a 'higher potential growth scenario' has been derived, built up from estimates of a reasonable level of potential employment growth at the level of each local authority. This anticipates **4,727 jobs per annum** between 2022 and 2040.

5.17 A spatial breakdown of this by local authority is set out in Table 5.2:

Table 5.2: Higher potential growth scenario, 2022-40

Authority	Total jobs	Jobs per annum
Blaenau Gwent	1,800	100
Bridgend	7,200	400
Caerphilly	4,284	238
Cardiff	39,114	2,173
Merthyr Tydfil	2,160	120
Monmouthshire	4,860	270
Newport	9,162	509
RCT	6,786	377
Torfaen	3,060	170
Vale of Glamorgan	6,660	370
CCR	**85,086**	**4,727**

Source: SQW

5.18 In each case, the higher potential growth scenario represents a significant increase on the baseline growth figure. The largest increases over the baseline are in Blaenau Gwent (where the baseline is negative), Caerphilly and Torfaen. This reflects the fact that these three authorities have the most manufacturing-oriented economies and are consequently most impacted by the continued contraction of the manufacturing sector assumed in the baseline forecasts.

Table 5.3: Comparing the higher potential growth scenario with the baseline (jobs per annum, 2022-40)

Authority	Baseline	Higher potential growth	% increase over baseline
Blaenau Gwent	-2	100	-
Bridgend	145	400	275
Caerphilly	66	238	359
Cardiff	1,300	2,173	167
Merthyr Tydfil	61	120	198
Monmouthshire	130	270	208
Newport	331	509	154
RCT	223	377	169
Torfaen	55	170	312
Vale of Glamorgan	130	370	285
CCR	**2,439**	**4,727**	**194**

Source: SQW

5.19 The higher potential jobs growth scenario forecasts employment growth which is more closely aligned to actual net additional job creation in the 1999-2019 period across CCR. However, the picture is not uniform across all local authority areas:

- Historic trend growth in Blaenau Gwent and Torfaen is negative, mainly reflecting manufacturing contraction. The higher potential jobs growth scenario implies a substantial reversal of this trend.
- Historic trend growth in the Vale of Glamorgan is also negative, although the higher potential jobs growth scenario anticipates growth of some 370 jobs per annum. This reflects the presence of substantial 'known' investments in the Vale, some of which are regionally significant in scale.
- In Rhondda Cynon Taf and Newport, the higher potential jobs growth scenario suggests a rate of employment growth which exceeds that suggested by the historic trend. In the case of Newport, this reflects the fact that the 20-year trend is depressed by significant manufacturing losses (e.g., Llanwern) in the early 2000s: the post-2009 trend has been much stronger and is arguably more reflective of the city's economy.
- This is offset by somewhat lower than historic trend growth elsewhere in the region.

5.20 Within the context of significantly greater job numbers in all areas under the higher potential growth scenario, the proportionate distribution of jobs across the region by 2040 is broadly the same in the baseline and the higher potential growth scenario.

Cardiff, which accounted for 33.5% of jobs in the region in 2022, is anticipated to account for 33.4% of jobs in 2040 in the baseline scenario, and 34.6% in the higher potential growth scenario. The Vale of Glamorgan will also see a slight increase in its share of total jobs in the higher potential growth scenario, with shares remaining static or showing a slight fall elsewhere.

Summary

5.21 The analysis in this chapter has identified:

- There is a supportive regional policy environment for employment growth. The *Regional Economic and Industrial Plan* sets out an approach to growth focused on innovation and productivity: while this emphasises the quality and value of employment rather than aggregate job creation, there is in general terms an ambitious approach to growth, especially focused on growing the region's capabilities in a series of priority sectors.

- This is supported by several investment programmes, including the CCR City Deal's Wider Investment Fund and the new Investment Zone. While these are not necessarily additional to the baseline, they do provide a pathway to additional job creation.

- Taking regional investments into account and triangulating them with 'known' local investments and other local intelligence, a series of growth narratives have been developed at local authority level. These have been used to develop a higher potential jobs growth scenario, which anticipates the creation of 85,086 additional jobs between 2022 and 2040, or 4,727 per annum. This is broadly in line (at regional level) with the 1999-2019 growth trajectory, and represents a significant increase on the reasonable baseline level of growth concluded in Section 4 across the CCR and for each component authority.

- There is little variance in the anticipated proportionate distribution of jobs across the region between the baseline and higher potential growth scenarios, with Cardiff showing a modest increase in its share of regional jobs.

6. Implications for migration and population growth

6.1 This section considers the implications for migration, and, by association, population change of the identified potential direction of travel of the employment narrative in the preceding section.

6.2 This section initially considers the level of labour growth which is modelled as being able to be supported based on a changing age profile and labour-force behaviour where demographic trends are sustained. This is then compared with the scale of labour, and by association population growth, which is assumed to be required to balance with the range of employment growth described in section 5.

6.3 Analysis has been undertaken to explore what the implications of stronger employment growth could potentially be on migration levels, benchmarking this against the historic trends considered in section 3.

6.4 Consideration is given to the implications of these independent constraints where it is recognised that a changing economic spatial distribution could in turn impact on flows of labour beyond existing relationships.

Estimating the demographic capacity to support employment growth

6.5 Edge Analytics has used POPGROUP forecasting technology to determine how the trend-based projections introduced in section 3 could accommodate a changing labour-force. In doing so they have taken forward assumptions around labour-force behaviours, building from the information presented in section 4.

6.6 Specifically, the scenarios presented in this sub-section assume a continuation of current rates of commuting (WG assumptions) and that current unemployment rates will be sustained on average over the plan period. Reflecting the uncertainties in the data around economic activity rates, the modelling has taken the judgement to retain the 2011 Census rates, where these are available in a consistent manner by age group and gender and represent a comparatively positive position for younger age groups. Acknowledging the implied increase in the rates of older cohorts, particularly amongst women, and enabling consistency with many of the studies previously undertaken by individual authorities, adjustments have been made to these groups which align with forecasts made by the OBR to reflect ongoing changes to pension ages.[26] This ensures that these older cohorts are assumed to play a more active role and contribution in the labour-force over the projection period.

[26] Office for Budget Responsibility (OBR) 2018 Fiscal Sustainability Report.

6.7 The outputs of the modelling are shown at Table 6.1, compared to the baseline jobs growth scenario. This indicates that, under both demographic scenarios, across the CCR there is a strong potential capacity to support a growing number of jobs[27] based on a continued trend of population growth.

Table 6.1: Projected number of jobs supported by the past-growth trend projections – CCR

	WG – 2018-based (Principal)	Past growth long-term trend	Past growth short-term trend	Baseline jobs growth
Job growth 2022-40	45,656	47,625	62,766	43,896
Average jobs per annum	2,536	2,646	3,487	2,439

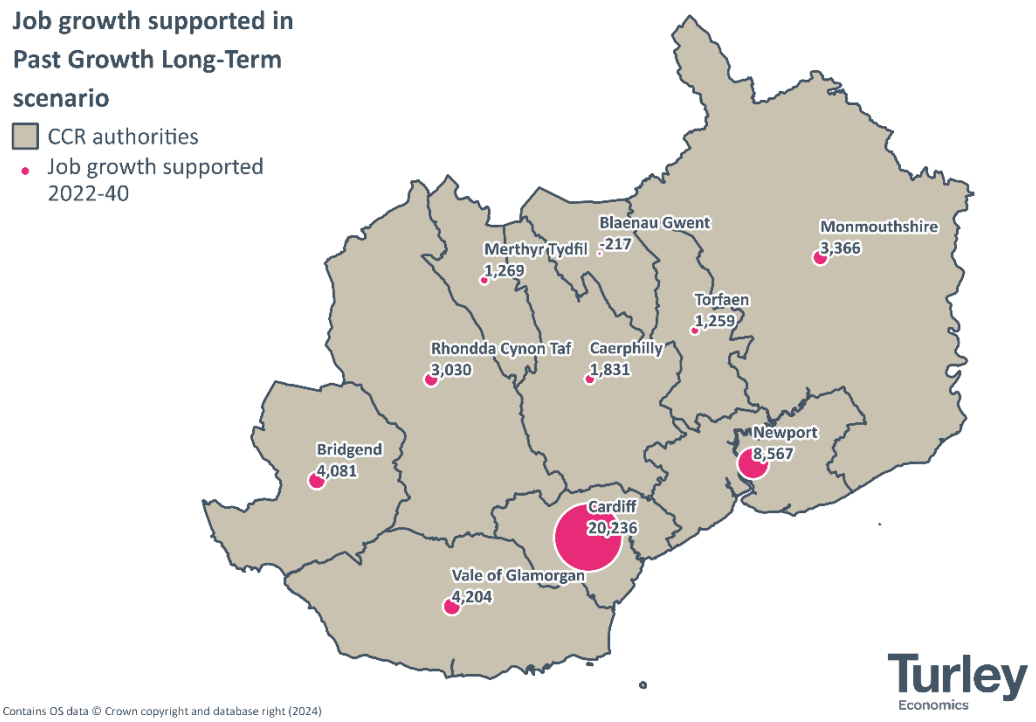
Source: Edge Analytics

6.8 Under all the trend-based demographic scenarios, the scale of labour-force growth is assumed to be more than sufficient to accommodate the baseline employment growth presented in Section 3. This suggests that if the population of the CCR continues to grow as it has done in the past, noting the variations in derived rates of growth, it will continue to be well placed to support a growing economy in line with a reasonable 'baseline' level of growth. Indeed, subject to the rate at which the population grows, the potential exists that additional labour capacity would be generated, if recent migration trends were sustained. This additional labour could potentially assist in attracting further economic investment or if this does not occur by inference it would be expected that a greater number of workers would commute out to other economic centres. This is considered further at the end of this section.

6.9 Figures 6.1 and 6.2 illustrates the spatial distribution of the projected capacity to support jobs at an individual authority level under each of the up-to-date trend-based projections. These sum to the figures presented in Table 6.1. This reflects the size of the working age population primarily, with this in turn dependent upon the projected age profile of individual authorities.

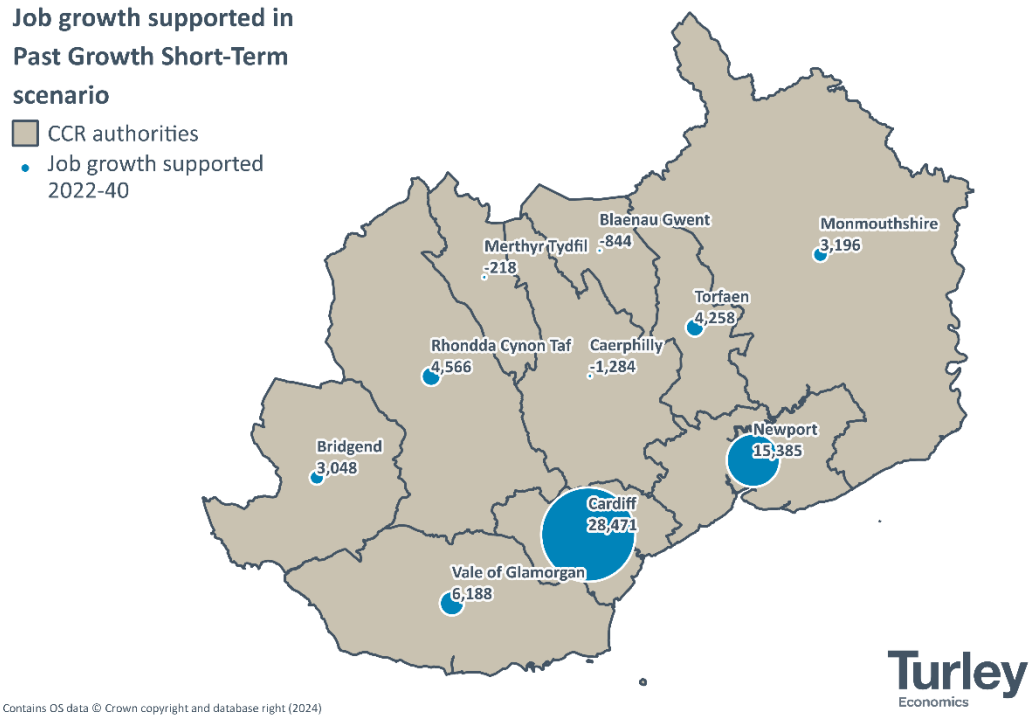
[27] The POPGROUP model derives a capacity to support employment based on a changing labour-force and accounting for commuting flows. This has been converted into jobs to allow for a direct comparison with the outputs in section 5 through the allowance of a 'double-jobbing' assumption. This recognises that a small proportion (2.5-5.5% across the CCR authorities) of people work more than one job meaning that the number of jobs supported by the labour-force is marginally higher than the modelled employment capacity.

Figure 6.1: Spatial distribution of jobs supported under the Past growth long term trend scenario



Source: Edge Analytics / Turley

Figure 6.2: Spatial distribution of jobs supported under the Past growth short term trend scenario



Source: Edge Analytics / Turley

6.10 Except for Blaenau Gwent all the authorities are projected to see a growth in the number of jobs they can support over the projection period in at least one of the two past growth demographic scenarios (noting Caerphilly and Merthyr Tydfil also suggest a decline in jobs supported based on the short-term trend). Reflecting their proportionate population size and their comparatively youthful populations the numbers of jobs potentially supported is particularly strong in Cardiff and Newport.

Supporting forecast employment growth scenarios

6.11 Adopting a common methodology, Edge Analytics has used the POPGROUP model to assess the potential implications of jobs growth across the CCR on population growth and the implied levels of migration. In an 'employment-led' scenario, population growth is determined by the defined levels of employment growth; net internal migration is used to balance between population and employment growth. Therefore, where the resident population is insufficient in size and structure to support the defined employment growth, a higher level of net migration will result.

6.12 As referenced above, all the demographic projections imply that the projected growth in labour-force will support a level of job growth which exceeds that viewed as representing a reasonable baseline employment forecast. Table 6.2 confirms that, at the CCR level, supporting the baseline level of employment growth (and assuming that the level of employment is a constraint on population growth), that a lower level of population growth and migration would arise. For reference, the comparable metrics for the Past Growth Long-Term trend scenario are included.

Table 6.2: Implications for demographic change of supporting the baseline jobs growth scenario – CCR

Scenario	Population growth 2022 - 2040	Annual average migration	Annual average jobs
Baseline jobs growth	57,214	4,729	2,439
Past growth long-term trend	65,858	5,140	2,646

Source: Edge Analytics

6.13 Whilst at a CCR level cumulatively the modelling indicates more than sufficient capacity to support the identified baseline level of jobs under the demographic scenarios, there are, as you would expect, variations at an authority level. Blaenau Gwent being the most obvious example, where the demographic projection suggests a reduced capacity to support jobs, but the baseline forecasts suggests that the economy will continue to grow and generate jobs. The modelling, which is built up from the authority level, therefore in this case adjusts the population in the authority to ensure there is sufficient labour to support the forecast job growth. This is done by assuming a more positive level of net-migration into the authority to ensure that there are enough working-age people who are assumed to be active in the workforce. Table 6.3 compares the projected growth in population by authority over the period 2022 – 2040 between the Past growth long term trend and the baseline jobs growth scenario.

Table 6.3: Comparing population growth assumed under the Past growth long-term trend scenario and the baseline jobs growth scenarios

Authority	Population Change 2022 – 2040		
	Past growth long-term trend	Baseline jobs growth	Difference
Blaenau Gwent	-404	161	564
Bridgend	8,976	5,969	-3,008
Caerphilly	2,840	1,417	-1,423
Cardiff	20,065	24,148	4,084
Merthyr Tydfil	1,664	1,321	-343
Monmouthshire	6,042	4,265	-1,777
Newport	12,662	8,216	-4,446
RCT	5,169	7,479	2,310
Torfaen	930	419	-511
Vale	7,914	3,821	-4,093
CCR Total	**65,858**	**57,215**	**-8,643**

Source: Edge Analytics

6.14 As noted above, within the modelling, migration is used as the balancing factor in adjusting the population within the baseline jobs growth scenario. Table 6.4 compares the assumed modelled migration under the baseline job growth scenario and the Past growth long-term trend scenario for each authority.

Table 6.4: Comparing modelled migration assumptions by authority under the baseline jobs growth and Past growth long-term trend scenarios

	Annual average net migration 2022–2040		
Authority	Past growth long term trend	Baseline jobs growth	Difference
Blaenau Gwent	208	234	25
Bridgend	973	822	-152
Caerphilly	570	501	-69
Cardiff	209	427	218
Merthyr Tydfil	181	163	-17
Monmouthshire	835	741	-94
Newport	432	220	-212
RCT	728	846	118
Torfaen	268	243	-25
Vale	736	533	-203
CCR Total	**5,140**	**4,729**	**-411**

Source: Edge Analytics

6.15 Table 6.4 confirms that supporting a baseline level of job growth would, based on continued commuting relationships, result in a stronger level of migration, and therefore population growth, in Cardiff and RCT as well as in Blaenau Gwent. All the other authorities would see a more modest level of demographic growth where the baseline level of forecast job growth would, within the modelling, serve as a constraint on their ability to attract people because of employment opportunities.

6.16 It is of note though, that in aligning the implied growth in population under the baseline jobs growth scenario would have a comparatively modest impact on the proportionate distribution of population across the CCR, when compared with that projected under the Past-growth long term trend scenario. This is illustrated in Figure 6.5. This shows the two authorities with the largest shares under the Past growth long-term trend scenario, Cardiff and RCT, further increasing their proportionate share of population under the baseline jobs growth scenario. Where Blaenau Gwent saw a trend-based decline in population under the Past growth long term scenario a more positive picture is presented under the baseline jobs growth scenario, with forecast jobs attracting more people and its proportionate share of population also increases.

Table 6.5: Difference in the spatial distribution of population under the Baseline jobs growth and the Past growth long term trend scenarios

Authority (ranked by % share)	Share of population in 2040	
	Past growth long-term trend	Baseline jobs growth
Cardiff	24.4%	24.8%
RCT	15.2%	15.4%
Caerphilly	11.1%	11.1%
Newport	10.8%	10.6%
Bridgend	9.7%	9.5%
Vale of Glamorgan	8.8%	8.6%
Monmouthshire	6.2%	6.1%
Torfaen	5.8%	5.8%
Blaenau Gwent	4.1%	4.2%
Merthyr Tydfil	3.8%	3.8%

Source: Edge Analytics / Turley

6.17 In contrast to the baseline level of job growth, it is apparent that the suggested potential narrative of stronger employment growth within the CCR to reflect strategic aspirations and investment, as set out in section 5, potentially exceeds the level of job growth which could be supported under the demographic scenarios.

6.18 Table 6.6 presents comparable outputs for those presented in Table 6.2, adding in the modelled implications of supporting the higher implied level of job growth.

Table 6.6: Implications on demographic change of supporting the higher potential jobs growth scenario – CCR

Scenario	Population growth 2022 - 2040	Annual average migration	Annual average jobs
Higher potential jobs growth	130,901	8,406	4,727
Baseline jobs growth	57,215	4,729	2,439
Past growth long-term trend	65,858	5,140	2,646
Past growth short-term trend	91,027	6,437	3,487

Source: Edge Analytics

6.19 As with the other scenarios, the comparative growth in population is different across the ten authorities under the higher potential jobs growth scenario. This is shown in a comparable format to that presented in Table 6.3 with the comparative scale of population growth assumed under the Past growth long-term trend scenario used as a benchmark. This shows that the modelling implies that a considerably higher level of population growth would be required across the CCR to support the higher level of job growth suggested. Indeed, it suggests that the population of the CCR would need to grow by more than 130,000 people, approximately double that projected based on the Past growth long-term trend scenario. Such a level of growth would result in an annual average increase of some 7,272 persons per year, notably higher than the annual average projected even under the Past growth short-term trend scenario (5,057 persons per annum).

Table 6.7: Comparing population growth assumed under the Past growth long-term trend scenario and the Higher potential jobs growth scenario

Authority	Population Change 2022 – 2040		
	Past growth long-term trend	Higher potential jobs growth	Difference
Blaenau Gwent	-404	5,216	5,620
Bridgend	8,976	15,290	6,313
Caerphilly	2,840	8,034	5,194
Cardiff	20,065	45,422	25,357
Merthyr Tydfil	1,664	3,370	1,706
Monmouthshire	6,042	8,601	2,559
Newport	12,662	13,538	876
RCT	5,169	14,211	9,042
Torfaen	930	4,192	3,263
Vale	7,914	13,027	5,113
CCR Total	**65,858**	**130,901**	**65,043**

Source: Edge Analytics

6.20 Where there are comparative differences in the implied likely uplift in the jobs from the baseline to the higher potential jobs growth scenario, as described in section 5, this has a bearing on the potential distribution of population. Table 6.8 compares the two jobs-led scenarios, highlighting how the higher potential jobs growth affects the proportionate share of the population across the CCR. This shows Cardiff further increasing its proportionate share of the population, with Bridgend, the Vale and Blaenau Gwent also seeing their proportionate share increase. It is important to observe that changes are in all cases comparatively modest.

Table 6.8: Difference in the spatial distribution of population under the Baseline jobs growth and the Higher potential jobs growth scenarios

Authority (ranked by % share)	Share of population in 2040	
	Baseline jobs growth	Higher potential jobs growth
Cardiff	24.8%	25.0%
RCT	15.4%	15.1%
Caerphilly	11.1%	11.0%
Newport	10.6%	10.5%
Bridgend	9.5%	9.7%
Vale of Glamorgan	8.6%	8.8%
Monmouthshire	6.1%	6.1%
Torfaen	5.8%	5.8%
Blaenau Gwent	4.2%	4.3%
Merthyr Tydfil	3.8%	3.7%

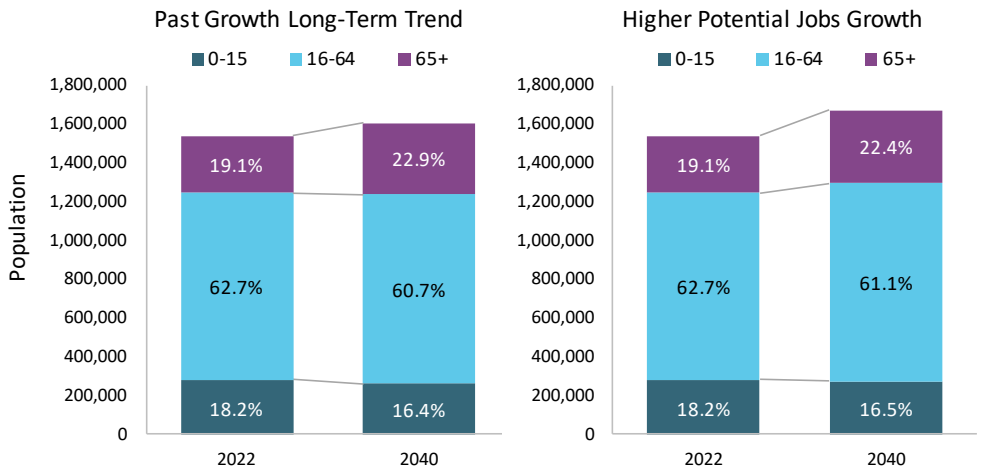
Source: Edge Analytics / Turley

The age structure of the population

6.21 The analysis above has identified that potentially supporting the stronger level of job growth implied when accounting for the outputs of section 5 will have implications for the population of the CCR and its component authorities. One of the important potential impacts would be a changed age profile, where a greater number of working age residents would be required to support employment growth.

6.22 Figure 6.3 contrasts the age profile implied under the Higher potential growth scenario, compared with the Past growth long term trend projection.

Figure 6.3: Comparing the age profile under the higher potential jobs growth scenario and the Past growth long term trend scenario



Source: Edge Analytics

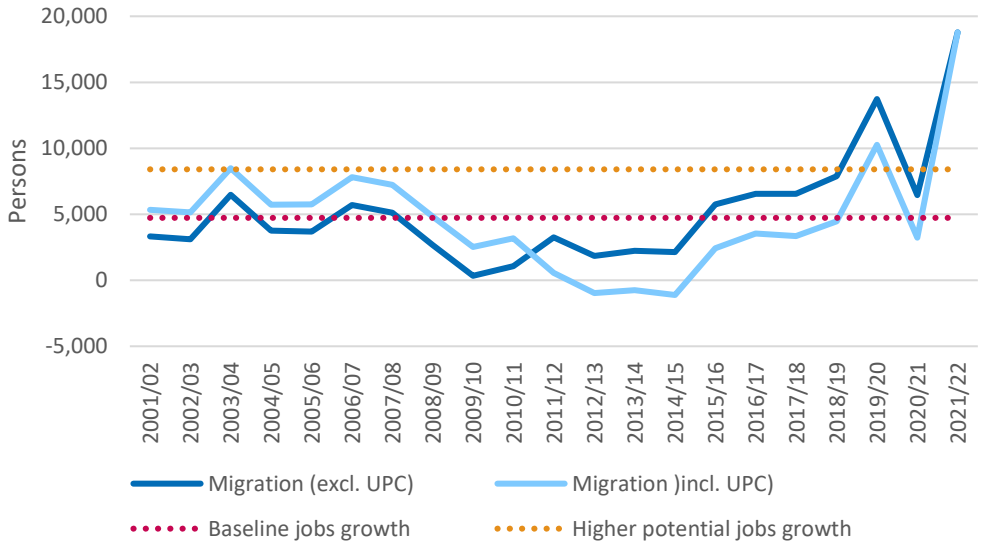
6.23 Whilst the comparative age profile remains relatively similar under both scenarios, reflecting longer-term trends around the ageing of the population in the area, the suggested stronger growth in jobs under the Higher potential growth scenario results in the 'working age' population (aged 16 – 64) making up a slightly larger proportion by 2040 than would be the case where the demographic trend is sustained.

Benchmarking migration

6.24 As referenced above where a higher level of population growth is assumed to support a higher level of job growth, the model addresses any gap in the labour-force by assuming a stronger net migration flow.

6.25 The average annual net migration implied under the range of employment scenarios is presented in Figure 6.4, benchmarked against annual historic levels back to 2001.

Figure 6.4: Comparing projected annual average net migration under the range of employment forecasts against historic annual rates – CCR



Source: Edge Analytics / Turley

6.26 To assist in comparing the implied annual levels of migration Table 6.9 compares historical migration per annum (including UPC) against the levels assumed under both the baseline jobs growth and higher potential jobs growth scenarios.

Table 6.9: Comparing projected annual average net migration under the range of employment forecasts against annual rates including UPC – CCR

Authority	Average Annual Net Migration 2022 - 2040		Average Annual Net Migration	
	Baseline Jobs Growth	Higher potential jobs growth	2001 – 2022 (inc. UPC)	2017 – 2022 (inc. UPC)
Blaenau Gwent	234	488	-45	13
Bridgend	822	1,294	828	847
Caerphilly	501	833	122	-74
Cardiff	427	1,464	1,573	2,677
Merthyr Tydfil	163	266	80	-40
Monmouthshire	741	970	576	764
Newport	220	482	711	1,300
RCT	846	1,176	215	814
Torfaen	243	433	67	565
Vale	533	1,001	624	1,148
CCR Total	**4,729**	**8,406**	4,751	8,013

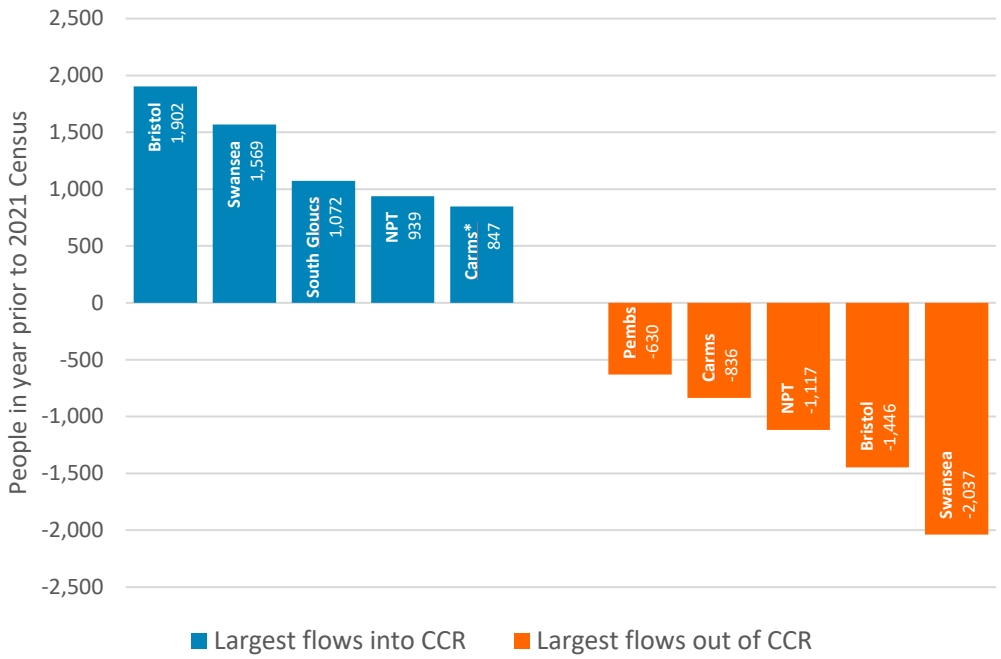
Source: Edge Analytics

6.27 It is evident from the above that whilst the implied level of net migration under the higher potential jobs growth scenario is comparatively high to that projected under the demographic past-trend scenarios it is not without precedent. Indeed, over the last 5 years, which have seen comparatively high levels of net migration, the average net rate of some +8,013 persons (including UPC) is comparable to the assumed net average under the scenario. This would imply, however, a continuation of these comparatively strong level of net migration per annum over a longer period. It is noted in this context that the average over the long-term (2001/02 – 2021/22) is notably below that assumed, with an average of some 4,751 per annum (again including UPC).

6.28 It is reasonable to assume that changes to migration levels, beyond those seen over the longer-term, could have implications for other areas from which migration flows have historically been stronger. It is important to note in this context, however, that as described in Section 3, a significant component of migration overall has been the net flows of international migrants. It is not possible to predict how international migration will change over the longer-term, where this could be influenced by national policy as well as the wider global economic picture, but it is reasonable to assume it will play some role over the projection period.

6.29 Looking at migration flows with other authorities within the UK Figure 6.5 shows those authorities with the largest flows in and out of the CCR, based on people registering that they had moved in the year prior to the 2021 Census.

Figure 6.5: Largest migration flows into and out of CCR



*Source: Census 2021 (*Carmarthenshire)*

6.30 This shows that the largest flows in and out of the CCR are from/to the large proximate urban areas of Bristol and Swansea, with the largest flow in from Bristol but the largest flow out to Swansea. Other significant flows are again with proximate authorities to either the east into England, south Gloucestershire, or to the west into NPT and Carmarthenshire. The largest flows out except for Bristol are all to the west within Wales. For net flows to be stronger and sustained it is reasonable to assume that flows would increase from those authorities where they have originated historically and potentially flows would be reduced out to those authorities which have historically been the destination. Evidently such trends would continue to be affected by the comparative strength of the factors influencing people's moves, which will include the availability of employment opportunities and wider comparative quality of life factors.

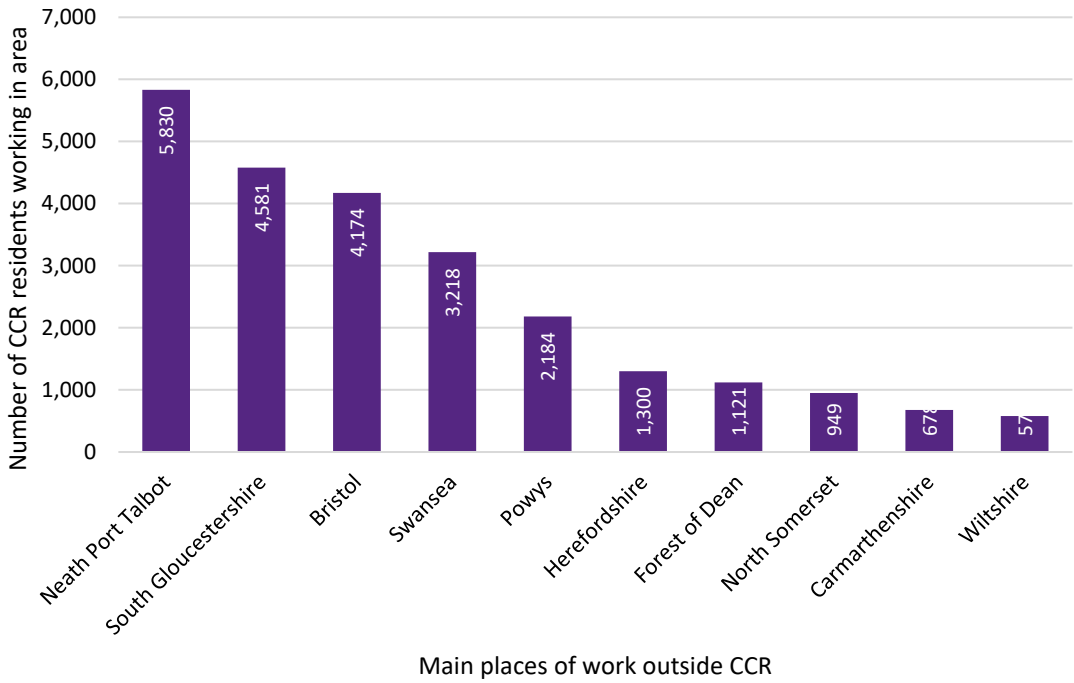
The relationship between resident-based employment and workplace-based employment

6.31 All the scenarios presented in this section and previous sections have assumed that current rates of commuting are sustained. In this regard, as referenced in Section 4, it is important to recognise that, currently, the CCR is a net exporter of labour; this is assumed to continue to be the case in the modelled scenarios.

6.32 Where the modelling applies assumed rates of commuting for each authority, the *ratio* is sustained under all the scenarios, but the assumed *absolute* levels change, due to the application of a rate to a differing sized population. The scale of difference at the CCR level, however, is relatively modest between the different scenarios, with each of the scenarios presented in this section continuing to assume that more than 28,500 people net commute out of the CCR to work elsewhere. Using the WG datasets considered in section 4 it is useful in this context to understand where the main places of work are

for the CCR, beyond its own internal commuting movements. This is shown in Figure 6.6.

Figure 6.6: Main places of work for CCR residents, excluding CCR



Source: WG 2022

6.33 This shows that the most significant flows are again with areas proximate to the CCR Flows are strongest with NPT to the west and then South Gloucestershire and Bristol to the East. Comparatively strong flows are also observed with Swansea and Powys but, beyond that, flows are relatively modest.

6.34 In accordance with the research objectives, analysis has been undertaken to consider the potential implications of the CCR become more self-contained with regards the balance of jobs and labour. It is recognised that the ability to directly affect commuting flows is very challenging, as they represent the inter-relationship of many factors including the comparative pull of the employment offer, affordability of housing, as well as the quality of the transport infrastructure connecting places.

6.35 Llwybr Newydd – The Wales Transport Strategy 2021 does, however, in this context proclaim an expectation that *'we need to change the way we travel. We need fewer cars on our roads, and more people using public transport, walking or cycling.'*[28]

6.36 It sets out three priorities to achieve this goal, with the first of these being to *'Bring services to people in order to reduce the need to travel'*. It is identified that increasing home and remote working will have a role to play, with the latter including support to enable *'people to work from an office near their home one more days a week instead of*

[28] Llwybr Newydd – The Wales Transport Strategy 2021, page 3

commuting long distances, in line with our wider Welsh Government target of 30% of the workforce to work remotely on a regular basis.'[29]

6.37 The second priority focusses through creating an accessible, sustainable and efficient transport service and infrastructure. Within the CCR this will include upgrades to Metro along with other Transport for Wales Investment Plans.

6.38 This commitment, in combination with a stronger performing local economy, as envisaged under the higher potential jobs growth scenario, could result in changes to commuting flows. It is not possible to predict such changes and this research has not sought to undertake such modelling or indeed to advocate such an approach could be achieved. Consideration is given below though to the potential consequences of moving towards self-containment within the CCR where this would evidently enable the stronger job growth envisaged to be realised through the retention and attraction of a lower level of population growth. In considering such a scenario it is critical to observe that any impacts realised on commuting flows have an impact not just on the CCR but also on those authorities where labour has historically travelled, including those identified above.

6.39 In basic terms under the baseline scenario the supply of labour projected under the demographic projections has been identified as exceeding the anticipated reasonable baseline supply of jobs by 2040. This would suggest that if the economy was to grow on the path implied by the baseline and the population was to continue to grow that the number of people commuting out of the CCR to other proximate employment centres would increase. It is therefore only under a scenario where higher potential jobs growth is generated within the CCR that a reduction in the net flow of commuters out of the CCR would be expected to be achieved.

6.40 It is reasonable to anticipate that the opportunities arising from achieving a stronger level of job generation would positively serve to achieve greater levels of working and living within the CCR. This would be reflective of the financial and wellbeing benefits associated with employment being more proximate to the place of residence.

6.41 Theoretically, as referenced above if the CCR achieved a closer to net-balance between in and out commuters this would generate a larger theoretical workforce by some 30,000 people (i.e. the current assumed net output based on a continuation of current rates by 2040[30]). If all these people were assumed to take up one of the extra jobs assumed under the higher potential jobs growth scenario this would, in theory, reduce the anticipated increase in population required to support job growth.

6.42 The comparative alignment between the number of projected employed people in the CCR by 2040 under the two demographic projections introduced in Section 3 and the amount of employment forecast in 2040 under the higher potential jobs growth scenario is shown in Table 6.10.

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[29] *Ibid*, page 15

[30] This is the output of the modelling within POPGROUP for the higher potential jobs growth scenario. It is noted that the absolute level of assumed net out-commuters from the CCR varies under each scenario where it is calculated using rates applied to different sizes of population at an individual authority level.

Table 6.10: Potential implications on the population of assuming a more self-contained CCR commuting scenario

Scenario	2040			Change in population 2022 – 2040
	Employed people	Employment	Population	
Past growth short-term trend	**796,360**		1,632,041	91,027
Higher potential jobs growth	820,090	**790,078**	1,671,915	130,901
Past growth long-term trend	**783,534**		1,606,872	65,858

Source: Turley / Edge Analytics analysis

6.43 This illustrates that the amount of employment forecast in the higher potential jobs growth scenario (790,078) in the CCR, whilst assumed to require a resident labour-force of some 820,090 in the POPGROUP modelling to sustain current commuting rates, could be supported by a resident labour-force which is assumed to exist by 2040 between the two demographic projections (783,534 – 796,360 persons) if there was a closer 1:1 balance between the two. This would suggest that the more pronounced growth in jobs could be supported by a lower level of population growth, somewhere broadly in the middle of the two scenarios, under such a set of circumstances.

6.44 The impact of changes to the flows of commuters out of the CCR would have varying impacts on individual authorities, with changes likely to be most pronounced on those on the periphery and on stronger transport corridors connecting to external employment centres. The underpinning model presented throughout this report continues to highlight that the comparative strength of the Cardiff economy would mean that flows would be expected to strengthen into the heart of the CCR, albeit recognising the comparative strength of stronger growth in a number of other authorities where levels are considerably above those assumed under baseline forecasts.

6.45 The above highlights the important consequences of the flows of commuting within and outside of the CCR on the balance between job growth and population change. Such considerations and the implications of investment in, for example, the Metro, will be an important consideration in the development of future policy at the CCR level.

Summary

6.46 The analysis in this chapter has identified:

- The population growth suggested under the Past growth scenarios, both long-term and short-term, would be expected to result in a growing labour-force which would be of a scale to accommodate the forecast baseline level of job

growth (circa 2,500 jobs per annum) across the CCR. This recognises that both scenarios assume a continuation of a comparatively strong level of net migration into the CCR, which in turn will continue to grow the size of the working age population with anticipated continued modest increases to the economic activity rates of older components of the labour-force also helping to support a growing employment base.

- There are variations at a local authority level, recognising the consequences and potential limitations of continuing to extrapolate forward past trends in population growth under these scenarios. For example, where Blaenau Gwent has seen its population decline over both a long- and short-term period this trend is extrapolated forward thereby suggesting that its labour-force will decline and therefore its capacity to accommodate further growth in jobs. In contrast, Cardiff which has seen its population grow over both time periods would also be expected to see its labour-force grow under these scenarios. This is particularly the case under the short-term trend scenario, reflecting the notably strong level of population growth seen in the most recent years and an assumption that stronger growth rates are sustained. A similar picture is seen for the Vale, Newport and Torfaen and to a lesser extent RCT, with all of these seeing recent positive growth in population with this suggesting that they would, if recent trends are sustained, be able to accommodate a comparatively strong growth in jobs. Extrapolating forward, the longer-term trend, in contrast provides a more positive potential picture for the number of jobs which could be supported in Bridgend, Monmouthshire, Merthyr Tydfil and Caerphilly. In the case of the latter two it is noted that it is only under a long-term trend-based scenario that a positive growth in employment is suggested as being able to be supported. It is recognised, as set out in section 3, that these trend-based demographic projections do not take into account the impacts of other drivers, such as the creation of employment arising from investment and the realisation of local growth opportunities.

- Where it is the case that the longer-term trend by its nature is less susceptible to the impact of potential short-term variations it has been used to illustrate the potential variation of population change across the CCR authorities where population is aligned to the baseline prospects for job growth. This identifies that for Cardiff, RCT and Blaenau Gwent, levels of forecast baseline jobs growth would result in population growth, which is higher than extrapolated based on long-term trends, therefore necessitating higher levels of net migration. This recognises in the case of Cardiff particularly the comparatively strong baseline jobs growth forecast. It is noted that a continuation of short-term population trends for Cardiff would, in contrast, generate a level of population growth and therefore labour that would considerably exceed the baseline jobs growth forecast. The same is also true for Newport, Torfaen and the Vale. It is noted that under the long-term trend the other authorities would all see population growth which would exceed that required to support baseline jobs growth, this would potentially impact on the commuting patterns of the workforce with the surplus labour-travelling to those areas with potential labour shortages (particularly Cardiff). Alternatively, the modelling would suggest that if employment is a key

driver of migration to an area that these authorities would experience lower levels of population growth than seen historically.

- Where it is assumed that the generation of jobs directly impacts population change, the modelling suggests that under the baseline jobs growth scenario that Cardiff would grow its proportionate share of the population in the CCR. The same would also be true of RCT when compared with the long-term past growth scenario. The scale of difference is relatively small, however.

- Supporting the higher potential level of job growth which has been identified would require, based on the same labour-force behaviour assumptions, the population of the CCR to grow at a rate which exceeds that suggested under even the Past growth short-term trend scenario across the CCR. This in turn would suggest a higher level of net-migration being sustained annually, to that assumed under either of the demographic scenarios. The assumed net migration, 8,406 persons per annum, is not without precedent and indeed falls below levels of net migration seen in the most recent years. It is observed, however, that sustaining this level of migration is something which has not been seen consistently in the CCR over the historic period considered.

- In considering the potential implications of a higher level of net migration being required into the CCR it is important to observe that stronger levels seen more recently have been significantly driven by a strong net flow of migrants from outside of the UK. In such a scenario it is reasonable to assume that this would continue to represent a significant potential source of additional people, albeit recognising that this could be influenced by political directions to limit migration into the country. Where a more positive contribution was to be made from other parts of the UK it is again reasonable to look to those areas which have been the main source or destination for those migrating in or out of the CCR. Bristol and Swansea have the strongest flows of people into the CCR and are equally the most significant destinations for those moving out. A net increase in migration into the CCR would be expected therefore to have a more pronounced impact on these larger proximate conurbations and their respective potential population growth.

- As identified in earlier sections of this report the latest available data continues to confirm that the CCR is a net exporter of labour, with close to 30,000 more people travelling out of it to work than travel in. Such flows are enabled by existing transport infrastructure and the proximity of employment opportunities in economic centres such as Bristol, Neath Port Talbot and the adjacent towns in South Gloucestershire. The modelling underpinning the findings above has assumed that such flows are sustained, recognising the challenges associated in forecasting and justifying alternative assumptions. Consideration has been given to a hypothetical scenario whereby the CCR sees a self-containment of labour, reflecting at least in part aspirations set out within the National Transport Strategy to see changes to travelling behaviours associated with the investment in the transport network within the CCR. This 'self-containment' analysis has highlighted that the higher potential jobs growth forecast could theoretically be accommodated through a more modest level of population growth, assuming

that more of the resident labour force is deployed in jobs within the CCR (rather than commuting out of the CCR). It is noted, however, that within the CCR itself existing commuting patterns would in broad terms be expected to be sustained, with flows continuing in the direction of Cardiff and Newport to reflect the fundamental differences in the balance of jobs and labour-force within individual authorities.

7. Policy considerations

7.1 The research objectives require consideration as to the potential alignment of the findings presented in the previous sections to national and local policy. In comparing the modelling outputs, it is important to recognise that all the analysis presented has been undertaken on the basis of 'policy-off' assumptions. It has not therefore sought to factor in policy objectives beyond the identification of or targeting of economic investment or designations. The implied trajectories of growth do not, as a result, seek to account for factors relating to the potential capacity of authorities to accommodate the growth in people projected or jobs, nor do they seek to reflect separate ambitions of authorities or indeed the CCR to use supply as a lever for achieving alternative outcomes. Such factors will be considered and evidenced as part of the development of policy, be that in the form of LDP reviews or in the future a Cardiff City Region sub-regional plan.

7.2 In this context high level consideration is given to the comparative alignment with national policy in the form of Future Wales and then existing and emerging LDPs across the CCR. Separate consideration is also given to the comparative alignment of the modelling to calculations of affordable housing need across the CCR, with this being a specific requirement of the brief.

Future Wales

7.3 In considering the potential alignment with Future Wales, as introduced in section 1, it is necessary to benchmark against the projections of growth which informed the development of the presented sub-regional targets for housing growth. Where this research has not been tasked with translating population growth into potential housing need such a benchmarking exercise must draw comparison with the underlying population projections, these being the 2018-based Principal Welsh Government projections.

7.4 The analysis in section 3 highlighted that these official projections are now based on demographic inputs which have been superseded by more recent information generated from the results of the 2021 Census. It showed, however, that in broad terms the trajectory of growth implied by the official projections aligned with a continuation of long-term demographic trends across the CCR and that, if more recent rates of stronger population growth were sustained, the end population forecast in 2040 would also potentially be achieved. These projections therefore suggest population growth which sits either side of that projected under the official projections. In headline terms there is therefore considered to continue to be a broad alignment with regards the updated demographic modelling and the implications for growth implied in Future Wales for the CCR.

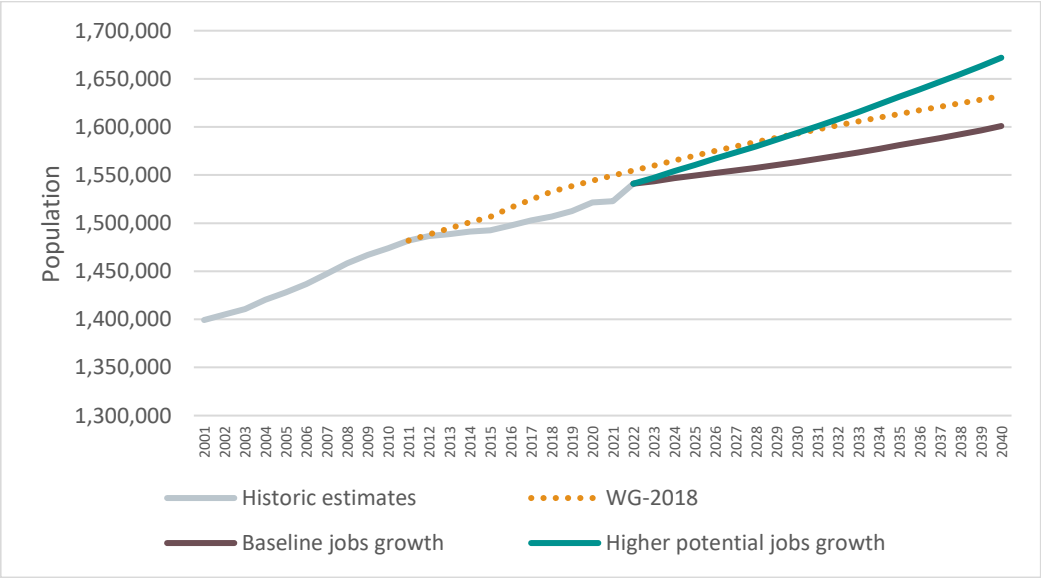
7.5 Where the focus of this research has been looking at the comparative impacts of different economic futures in the CCR on population growth it is important to recognise the identification of large parts of the area as a National Growth Area in Future Wales.

7.6 Looking first at the conclusions of the study regarding the baseline jobs growth it is reasonable to observe that the identified potential growth of in the order of 2,500 jobs per annum would fall short of the demographically derived growth identified in Future Wales. This recognises that the baseline jobs growth scenario suggests a level of population growth (57,214 persons) over the period 2022 – 2040, which falls short of that projected under the official projections (77,489 persons). Such an outcome would also potentially suggest a lack of alignment with the ambitions associated with the designation of the CCR as a 'National Growth Area'.

7.7 The research has, however, identified a reasonable prospect of considerably stronger job growth being able to be supported within the CCR. This recognises identified investments such as the City Deal, local authority-led investment projects and economic opportunities, as well as an acknowledgement of the comparatively stronger historic performance of sectors and parts of the CCR when contrasted with the baseline forecast assumptions. This stronger level of job growth would potentially be more commensurate with the aspirations implied by the national growth area designation and as noted seeks to account for the anticipated additionality associated with nationally awarded funding.

7.8 In considering the implications of supporting higher potential jobs growth, as shown in Figure 7.1, the modelling has shown, based on a continuation of current commuting assumptions, that a considerably higher level of population growth, and therefore migration into the CCR, would be likely to be required to sustain this stronger level of employment growth. Such a level of population growth would exceed that projected under the official projections, with this having potential implications for the provision of supporting infrastructure to accommodate this growth in population sustainably.

Figure 7.1: Comparing implied population growth under the jobs-led scenarios and the 2018-based population projections



Source: Edge Analytics

7.9 The above projection outputs have, as explained in section 6, all assumed a continuation of current commuting relationships within individual authorities and therefore for the CCR. Further modelling has been presented at the end of section 6 to illustrate how a potential scenario whereby if the CCR's current role as an exporter of labour was to change that this would have implications for the assumed balance between job growth and population growth.

7.10 Where the analysis is presented only by way of illustration it confirms that more modest levels of population growth, closer to the official projections, could support the higher levels of potential job growth where there is an assumption that more people live and work within the CCR. Any such changes, would as is explained, be expected to have implications for other local economies to which current comparatively high levels of commuters from the CCR travel, where such labour flows would be anticipated to reduce. As noted at the start of this section it is not the purpose of this research to assess the reasonableness of such changes and it is considered that policy would only be expected to have limited influence where the range of factors influencing commuting patterns is complex.

Existing and emerging Local Development Plans

7.11 The review of job growth assumptions and informing evidence base documents for each of the recently adopted or emerging LDP Reviews in section 2 identified that cumulatively across the CCR these anticipated growth of in the order of 4,929 jobs per annum.

7.12 It is important to recognise, as highlighted through the review in section 2, that this appraisal of potential or sought job growth whilst presented as a collective figure is based on individual authority figures which are generated for different plan periods and using different methodologies. In several cases, it reflects the application of what could be termed 'policy-on' assumptions. Any comparison with the outputs of the assessment of potential reasonable job growth presented in this report therefore needs to be considered in this context and for illustrative purposes only.

7.13 In this regard in Table 7.2 the annual job figures presented in Table 2.1 are contrasted with the assumed annual levels of job growth arising out of the modelling presented in sections 4 and 5 of this report, highlighting where each are higher or lower.

Table 7.2: LDP job growth expectations compared with the range of job scenarios generated

Authority	Forecast average job growth per annum[31]	Baseline jobs growth scenario	Higher potential jobs growth scenario
Blaenau Gwent	100	-2	100
Bridgend	500	145	400
Caerphilly	258	66	238
Cardiff	2,153	1,300	2,173
Merthyr Tydfil	125	61	120
Monmouthshire	416	130	270
Newport	576	331	509
RCT	266	223	377
Torfaen	179	55	170
Vale	356	130	370
CCR Total	**4,929**	**2,439**	**4,727**

Source: SQW / Turley

7.14 It is apparent from the table above that under the baseline scenario each authority has a potential forecast job growth per annum figure which is below that arrived at within their emerging policy positions. This position aligns with the fact that in all cases the authorities have arrived at their job growth position through positive assumptions or aspirations to deliver growth above a baseline level. This is, however, an important consideration in reinforcing the conclusion noted above that supporting only a baseline level of job growth would fall significantly below individual authority expectations and aspirations as well as the CCR when framed in the context of the policy goals of Future Wales.

7.15 The development of a narrative of higher potential employment growth has served to identify a reasonable pathway for stronger growth for each authority. In aggregate at regional level, this broadly aligns with levels of growth anticipated in local authorities' evidence bases. Looking at individual local authority level:

- The higher potential employment growth scenario anticipates growth at or within 10% of levels of growth articulated in the respective LDP evidence bases in Blaenau Gwent, Caerphilly, Cardiff, Merthyr Tydfil, Torfaen[32] and the Vale of Glamorgan.

[31] Note: These are calculated based on the total jobs figure over the number of years in the stipulated plan period. Plan periods vary in terms of their start and end dates.

[32] The RLDP figure quoted for Torfaen relates to the now withdrawn RLDP, although a further Employment Land Review has recently been prepared.

- In two local authorities, the higher potential employment growth scenario is significantly lower than articulated in the RLDP evidence base: Monmouthshire and Bridgend. In both cases, the jobs target within the RLDP evidence base reflects explicit 'policy -on' assumptions in underpinning assumed job growth levels to reflect policy-led ambitions, which we have not sought to replicate in this research. The scenario is also somewhat lower than the RLDP stated level in Newport.

- In Rhondda Cynon Taf, the growth level quoted in the emerging RLDP evidence base is close to the baseline level, and the higher potential employment growth scenario is significantly higher.

7.16 The authorities have also undertaken an audit of the implied population growth assumed within their evidence base documents in justifying the approach taking to supporting population related growth (primarily housing numbers) in their recently adopted and emerging Plans. Comparison has been made between these population growth expectations and the implied levels modelled as being required to support the higher potential jobs growth scenario[33].

7.17 At the CCR level the authorities review indicated that cumulatively the LDPs were assuming population growth of in the order of 8,463 persons per year, with the authorities generally forecasting over a 15-year period. It is noted that in several cases the periods of forecasting stretched back to 2018, with one authorities figure going back to 2016. These are notably different projection periods to that considered in this report. Recognising this difference, it is apparent, however, that the implied per annum growth in population, even under the higher potential jobs growth scenario, as set out in section 6 is modestly lower than that suggested cumulatively across the LDPs, at some 7,272 per annum.

7.18 In comparing the modelling in this report with the implied levels of population growth derived through comparable modelling prepared to support the individual authority plans it is important to observe that it has integrated the latest available demographic assumptions. This has included, as noted in section 3, using updated fertility and mortality rates as well as historic migration profiles. This makes direct comparison more challenging where it is noted that the assumed changes to fertility rates have a downward impact on forecast population growth. It is noted, however, in this context that whilst reduced fertility rates will have an impact on the overall size of the resident population, over the projection period to 2040 the impacts are seen only in the youngest cohorts and therefore the changes to fertility do not influence the size of the labour force age group.

7.19 It is also, as noted above, important to recognise that the modelling in this report extends out to 2040 and when compared with the official projections does suggest a notably stronger level of growth. It is important therefore to view it as a comparatively positive projection, even where it falls below that previously modelled as being required based on the individual authority modelling outputs.

[33] For this exercise comparison has only been made with the scenarios which assume a continuation of current commuting rates within the modelling.

Affordable housing

7.20 The research brief specifically references that consideration be given to the latest evidence of affordable housing need across the CCR. This recognises that the provision of sufficient amounts of affordable housing to positively address housing needs is an important policy aspiration within Future Wales and other aspects of national planning and strategies.

7.21 Table 7.2 presents information from the latest assessments of affordable housing need undertaken by each of the authorities, noting that in some cases these remain draft figures. It shows the total need across the CCR and the proportion that each authority's figure makes to that total. This is contrasted with the comparative share of population each authority represents in 2040 under the higher potential jobs growth scenario. In most cases these assessments have been undertaken using the WG LHMA Toolkit.

Table 7.3: Latest calculations of affordable housing need by authority

Authority	Date of LHMA	LHMA Affordable need per annum over first 5 years share of CCR total	LHMA Affordable need per annum over next 10 years share of CCR total	Share of population in 2040 under the higher potential jobs growth scenario
Blaenau Gwent	2024	0.9%	2.2%	4.3%
Bridgend	2021	6.8%	13.5%	9.7%
Caerphilly[34]	2023	3.3%	8.9%	11.0%
Cardiff	2023	24.9%	37.7%	25.0%
Merthyr Tydfil	2024	4.8%	0.8%	3.7%
Monmouthshire	2024	7.5%	4.2%	6.1%
Newport	2023	19.3%	11.3%	10.5%
RCT	2024	11.2%	9.1%	15.1%
Torfaen	2023	4.7%	3.1%	5.8%
Vale	2023	16.7%	9.2%	8.8%
CCR Total	**n/a**	**6,669**	**2,132**	**n/a**

Source: Authority evidence base documents

7.22 The above identifies a significant need for affordable housing over the next 5 years, a cumulative need for almost 6,700 affordable homes across the CCR. Where this is the outcome of addressing a significant scale of existing unmet need within this time horizon the comparative need considerably falls when looking at the ten-year period.

[34] Caerphilly Council specifically noted that their LHMA remained in draft form at the time of writing.

The scale of need even at this lower level is still significant across the CCR, at over 2,100 homes per annum.

7.23 Looking at the proportionate distribution of need it is apparent over the short-term at least that comparatively high proportions are evident in Monmouthshire, Newport, the Vale and Torfaen when compared with the implied proportionate representation of population in 2040 under the higher potential jobs growth scenario outputs. The picture is slightly different under the ten-year calculation of need with comparatively high proportions apparent in Bridgend, Cardiff, Newport and the Vale.

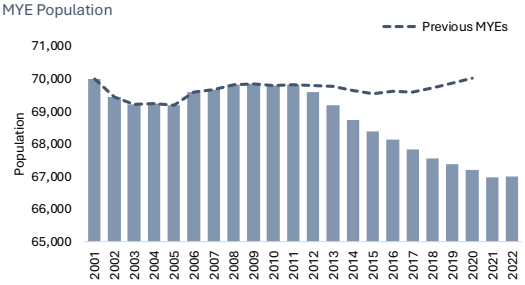
7.24 It is noted that in using the toolkit to generate the levels of affordable need presented above each authority has input an assumption around projected population growth. In several cases this is one of the WG official projections, albeit it is noted that only 3 authorities have used the 2018-based principal projection (that referenced in Future Wales). Several of the authorities have used higher input population projections associated with policy-led levels of growth.

7.25 In this context it is not appropriate to compare directly with the population growth projections presented in this report. However, it is pertinent to observe that the analysis has identified the potential for higher levels of population growth beyond that projected under the official projections to support higher job growth. Where a proportion of this growth will necessitate a need for affordable housing it is reasonable to assume that the high levels of need implied by the above would also arise should the population of the CCR grow as projected in the higher jobs-led scenario and this be input to the toolkit. It is also recognised that positively addressing such high levels of affordable housing need will require a boosting of housing supply more widely, where provision is directly related to ability in many cases to cross-subsidise through the provision of market housing. Recognising that affordable housing need is high in each of the authorities will represent an important policy-led factor for individual LDP reviews alongside the consideration of potential employment and population growth levels.

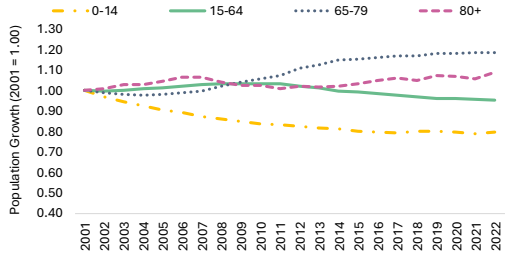
Appendix 1: Authority demographic profiles

Blaenau Gwent / Blaenau Gwent: Population Profile

MYE Population

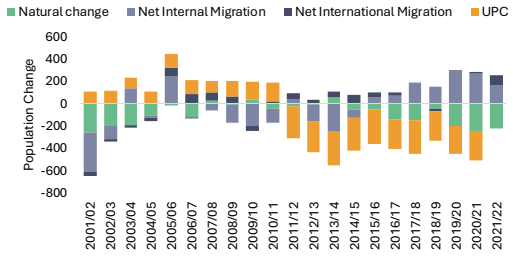


Population Growth Index by Age Group

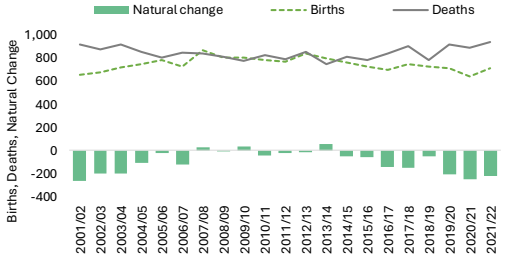


Components of Change

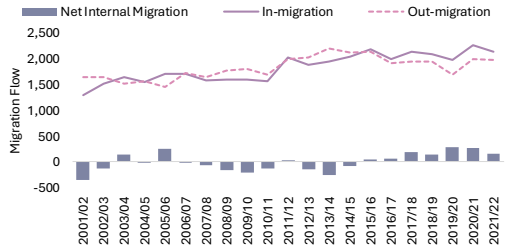
Components of Change



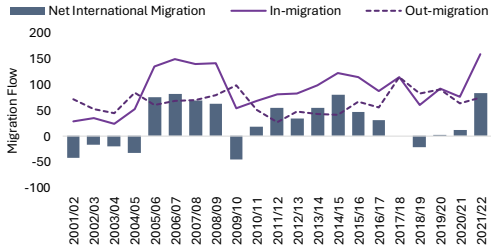
Natural Change



Internal Migration



International Migration

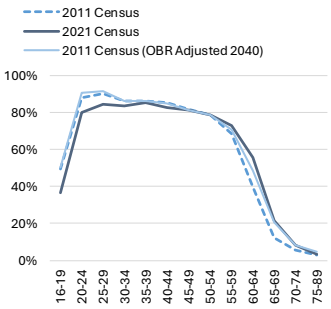


Components Summary: Blaenau Gwent / Blaenau Gwent

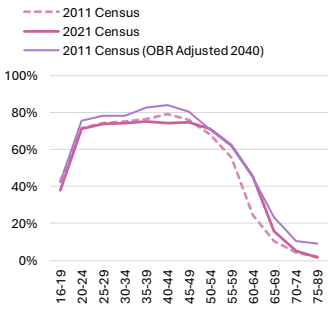
Time period	Births	Deaths	Natural Change	Internal in-migration	Internal out-migration	Net Internal Migration	International in-migration	International out-migration	Net International Migration	UPC
2001–2022	747	844	-97	1,831	1,828	4	91	66	25	-78
2011–2022	738	840	-102	2,061	1,993	68	99	64	34	-280
2017–2022	708	884	-176	2,120	1,909	211	100	85	15	-266

Labour Force Summary: Blaenau Gwent / Blaenau Gwent

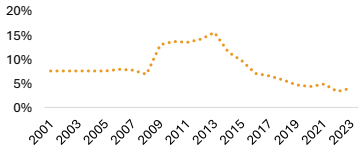
Economic Activity Rates: Males



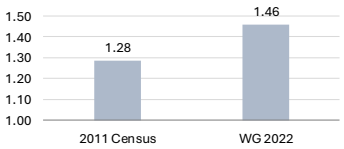
Economic Activity Rates: Females



Unemployment Rate

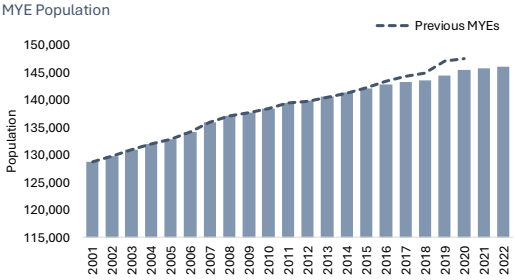


Commuting Ratio Comparison

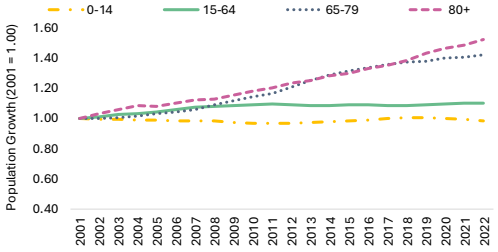


Bridgend / Pen-y-bont ar Ogwr: Population Profile

MYE Population

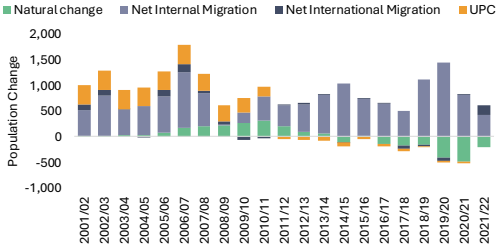


Population Growth Index by Age Group

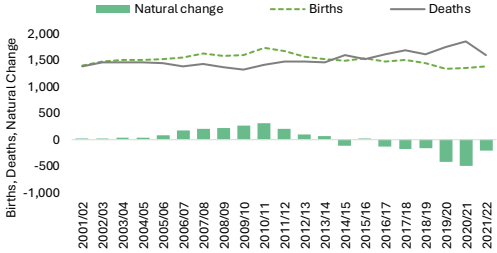


Components of Change

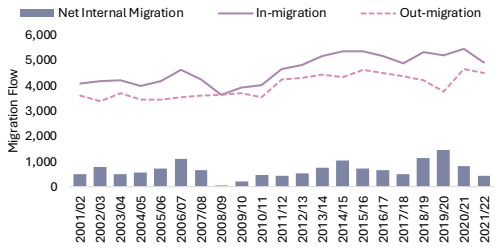
Components of Change



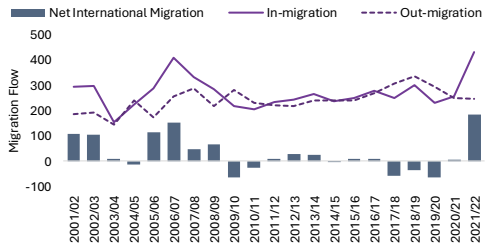
Natural Change



Internal Migration



International Migration

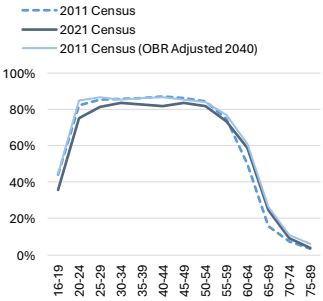


Components Summary: Bridgend / Pen-y-bont ar Ogwr

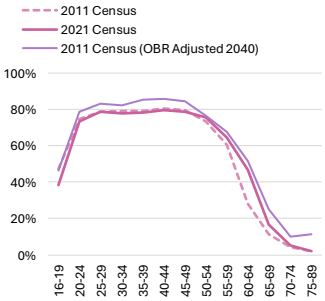
Time period	Births	Deaths	Natural Change	Internal in-migration	Internal out-migration	Net Internal Migration	International in-migration	International out-migration	Net International Migration	UPC
2001–2022	1,511	1,510	1	4,616	3,956	661	270	241	29	145
2011–2022	1,479	1,600	-121	5,099	4,336	764	270	259	10	-46
2017–2022	1,403	1,694	-291	5,135	4,275	860	292	286	7	-25

Labour Force Summary: Bridgend / Pen-y-bont ar Ogwr

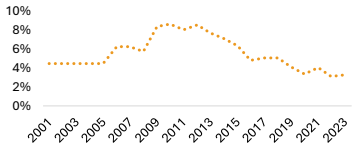
Economic Activity Rates: Males



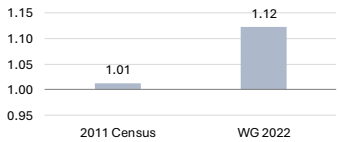
Economic Activity Rates: Females



Unemployment Rate

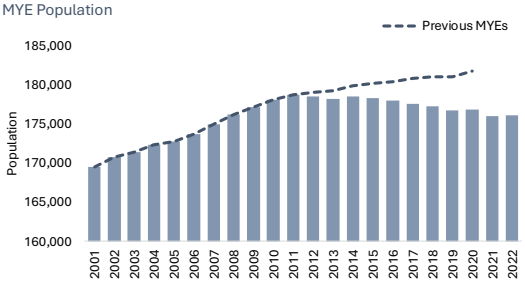


Commuting Ratio Comparison

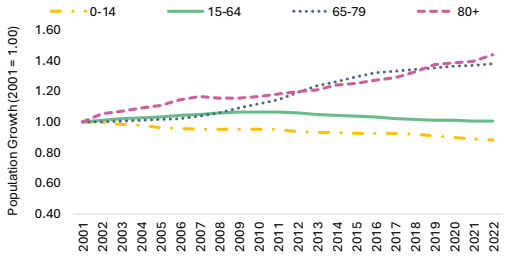


Caerphilly / Caerffili: Population Profile

MYE Population

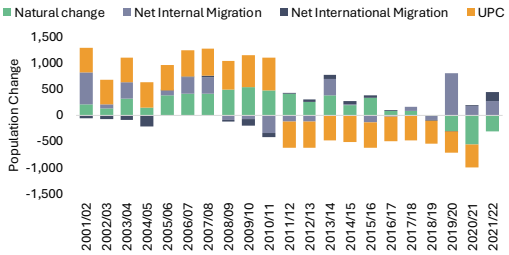


Population Growth Index by Age Group

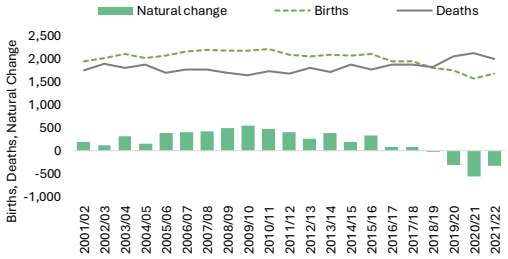


Components of Change

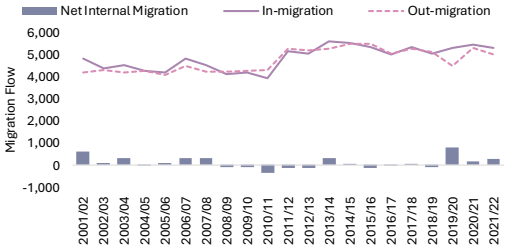
Components of Change



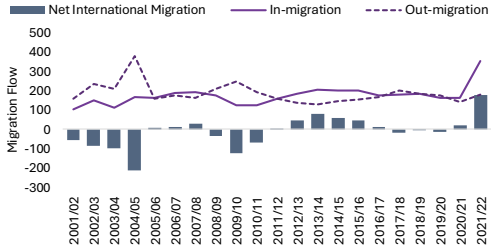
Natural Change



Internal Migration



International Migration

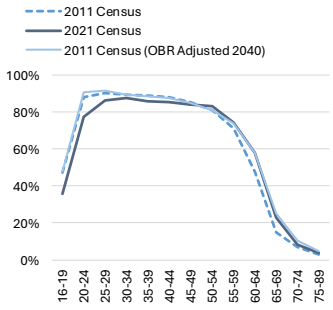


Components Summary: Caerphilly / Caerffili

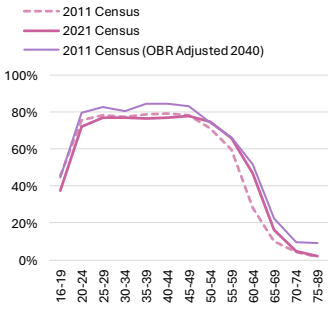
Time period	Births	Deaths	Natural Change	Internal in-migration	Internal out-migration	Net Internal Migration	International in-migration	International out-migration	Net International Migration	UPC
2001–2022	2,003	1,811	192	4,844	4,732	112	173	184	-11	22
2011–2022	1,912	1,863	49	5,275	5,172	103	196	160	36	-472
2017–2022	1,745	1,967	-222	5,279	5,035	244	208	175	33	-439

Labour Force Summary: Caerphilly / Caerffili

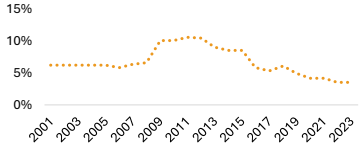
Economic Activity Rates: Males



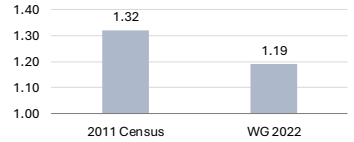
Economic Activity Rates: Females



Unemployment Rate

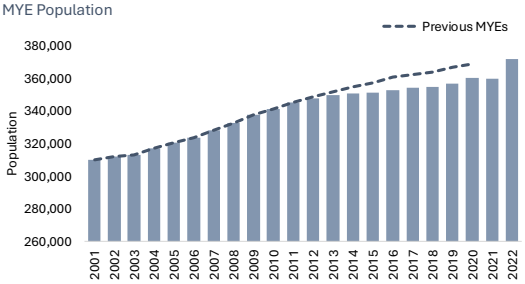


Commuting Ratio Comparison

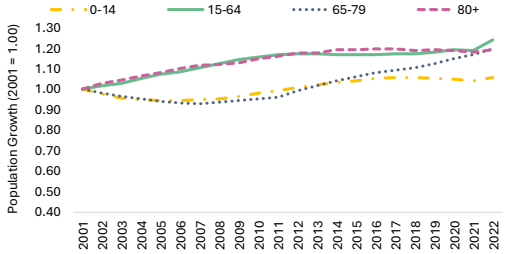


Cardiff / Caerdydd: Population Profile

MYE Population

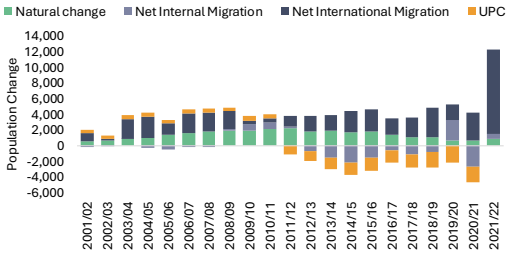


Population Growth Index by Age Group

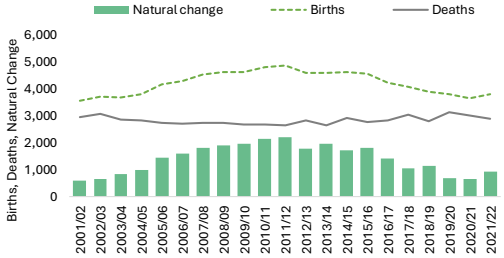


Components of Change

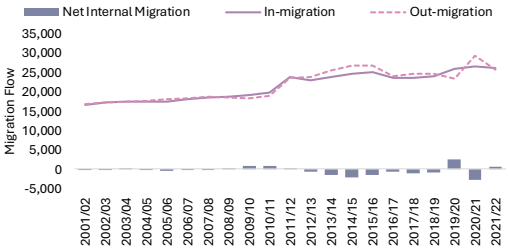
Components of Change



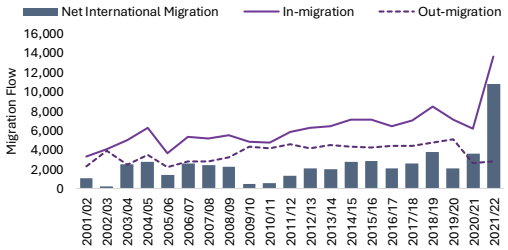
Natural Change



Internal Migration



International Migration

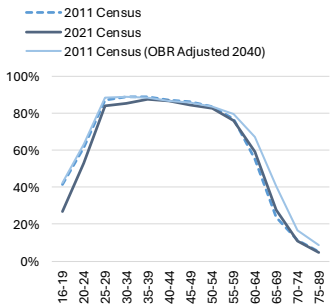


Components Summary: Cardiff / Caerdydd

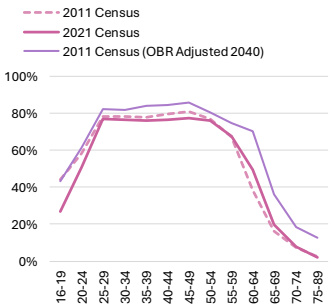
Time period	Births	Deaths	Natural Change	Internal in-migration	Internal out-migration	Net Internal Migration	International in-migration	International out-migration	Net International Migration	UPC
2001–2022	4,202	2,823	1,380	21,443	21,793	-350	6,158	3,681	2,477	-582
2011–2022	4,235	2,855	1,380	24,534	25,250	-716	7,413	4,153	3,260	-1,652
2017–2022	3,836	2,964	872	25,230	25,522	-292	8,461	3,912	4,549	-1,976

Labour Force Summary: Cardiff / Caerdydd

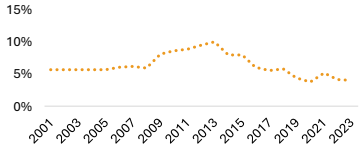
Economic Activity Rates: Males



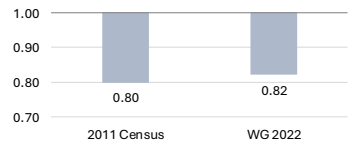
Economic Activity Rates: Females



Unemployment Rate

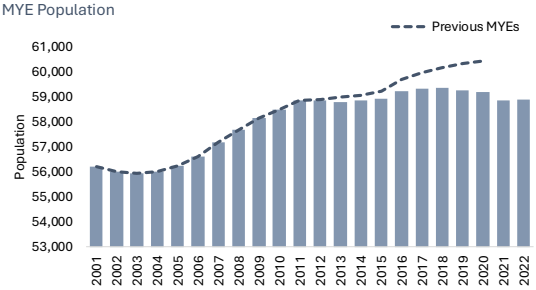


Commuting Ratio Comparison

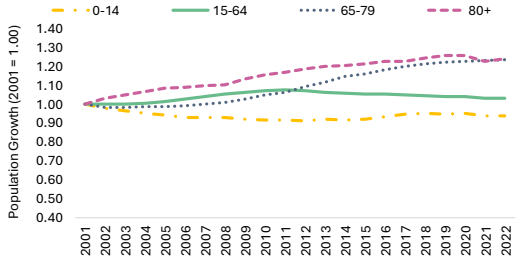


Merthyr Tydfil / Merthyr Tudful: Population Profile

MYE Population

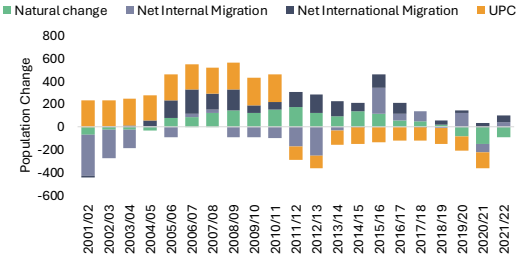


Population Growth Index by Age Group

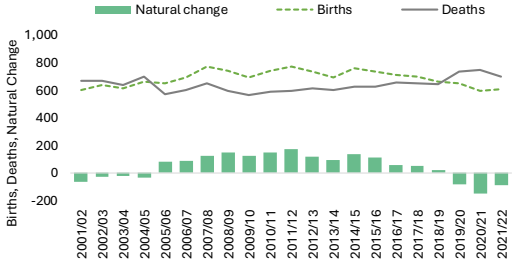


Components of Change

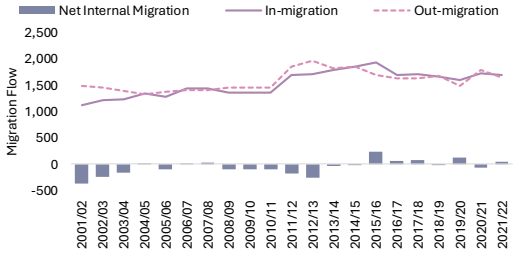
Components of Change



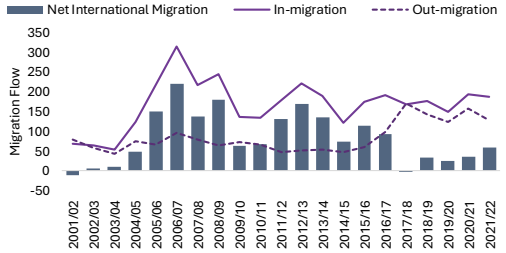
Natural Change



Internal Migration



International Migration

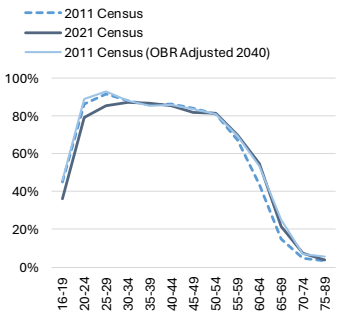


Components Summary: Merthyr Tydfil / Merthyr Tudful

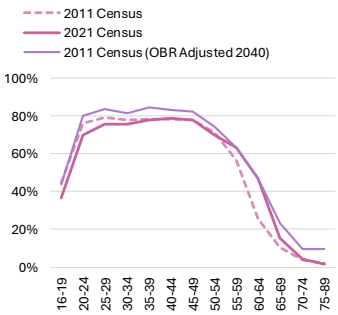
Time period	Births	Deaths	Natural Change	Internal in-migration	Internal out-migration	Net Internal Migration	International in-migration	International out-migration	Net International Migration	UPC
2001–2022	686	639	47	1,530	1,582	-51	168	85	83	51
2011–2022	691	652	40	1,730	1,730	0	177	98	79	-127
2017–2022	642	693	-51	1,678	1,644	34	175	145	31	-131

Labour Force Summary: Merthyr Tydfil / Merthyr Tudful

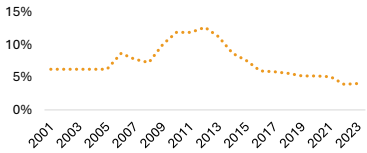
Economic Activity Rates: Males



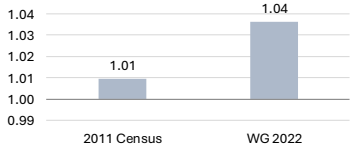
Economic Activity Rates: Females



Unemployment Rate

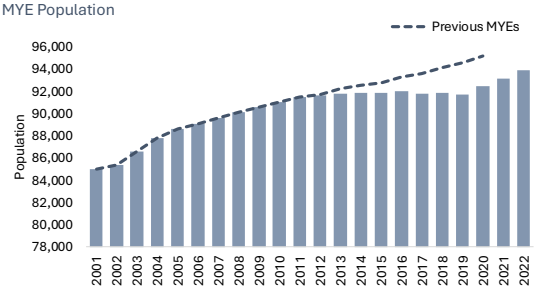


Commuting Ratio Comparison

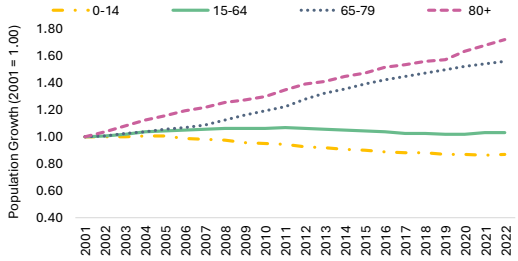


Monmouthshire / Sir Fynwy: Population Profile

MYE Population

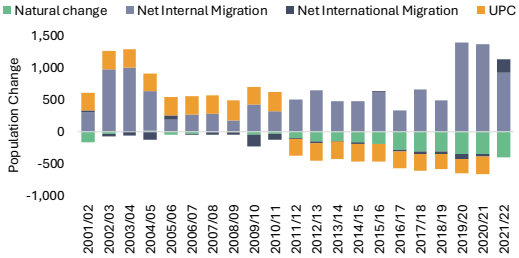


Population Growth Index by Age Group

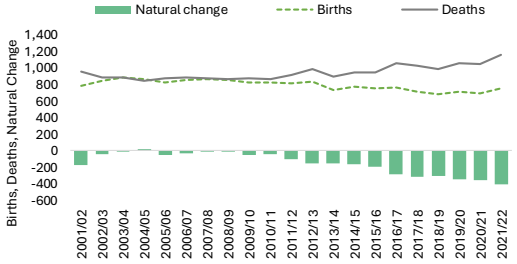


Components of Change

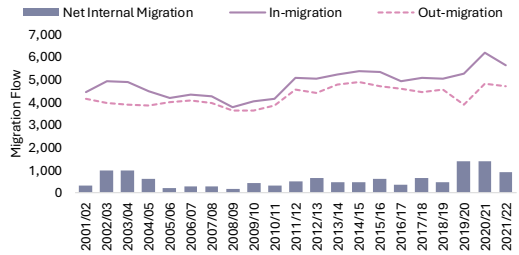
Components of Change



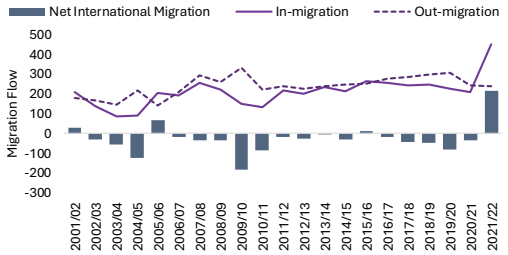
Natural Change



Internal Migration



International Migration

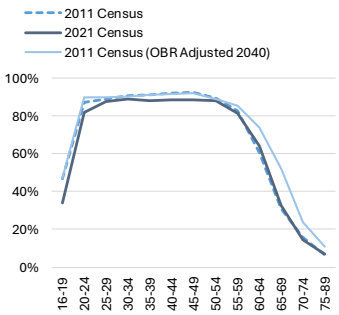


Components Summary: Monmouthshire / Sir Fynwy

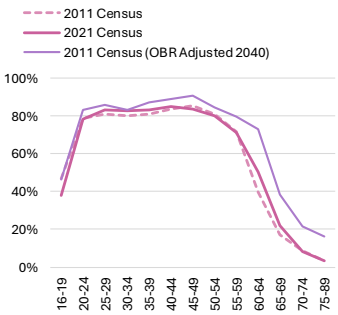
Time period	Births	Deaths	Natural Change	Internal in-migration	Internal out-migration	Net Internal Migration	International in-migration	International out-migration	Net International Migration	UPC
2001–2022	794	946	-152	4,842	4,254	588	211	238	-27	15
2011–2022	750	1,003	-253	5,288	4,574	713	250	258	-8	-260
2017–2022	712	1,057	-345	5,440	4,480	960	274	273	1	-247

Labour Force Summary: Monmouthshire / Sir Fynwy

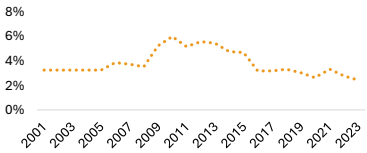
Economic Activity Rates: Males



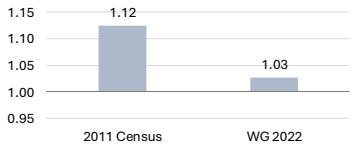
Economic Activity Rates: Females



Unemployment Rate

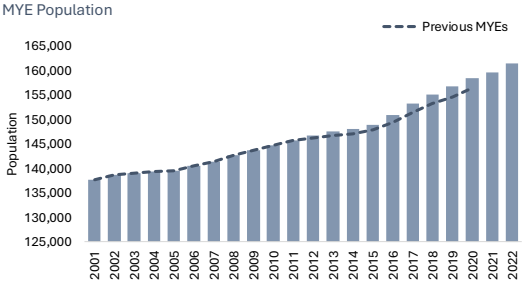


Commuting Ratio Comparison

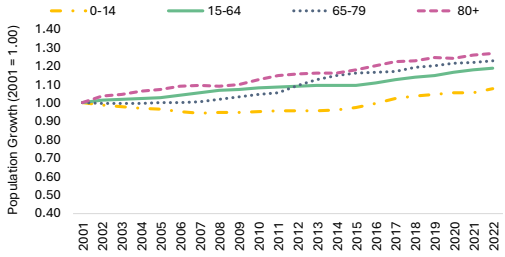


Newport / Casnewydd: Population Profile

MYE Population

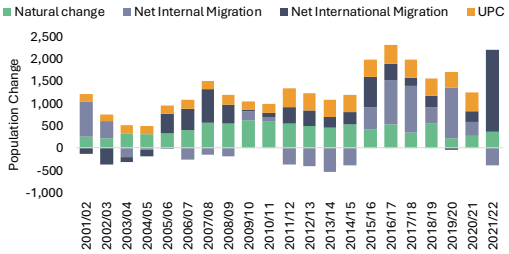


Population Growth Index by Age Group

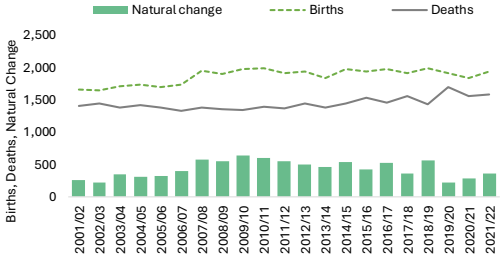


Components of Change

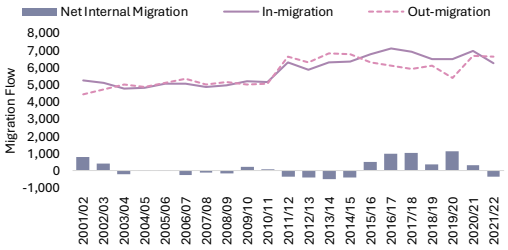
Components of Change



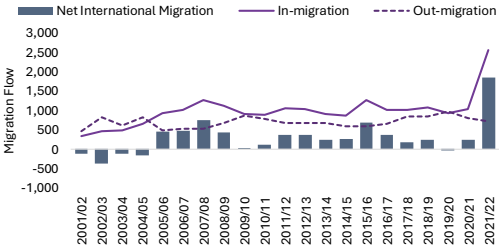
Natural Change



Internal Migration



International Migration

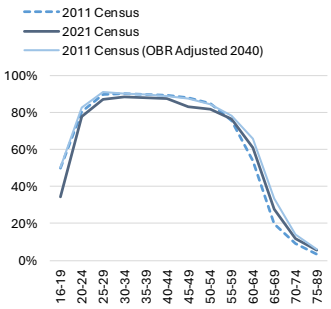


Components Summary: Newport / Casnewydd

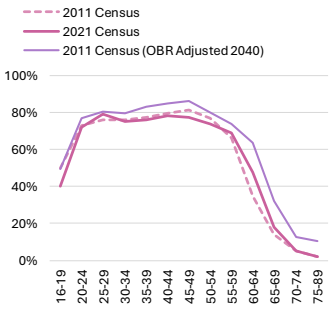
Time period	Births	Deaths	Natural Change	Internal in-migration	Internal out-migration	Net Internal Migration	International in-migration	International out-migration	Net International Migration	UPC
2001–2022	1,863	1,437	426	5,805	5,667	138	989	693	297	289
2011–2022	1,922	1,491	432	6,520	6,314	207	1,158	727	432	395
2017–2022	1,916	1,562	354	6,616	6,121	494	1,325	828	496	388

Labour Force Summary: Newport / Casnewydd

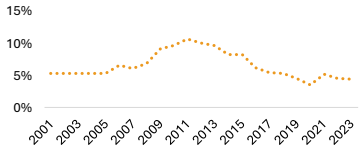
Economic Activity Rates: Males



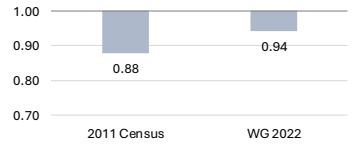
Economic Activity Rates: Females



Unemployment Rate

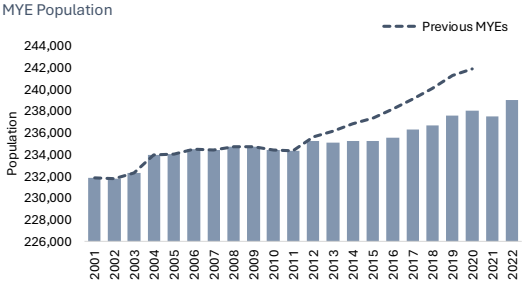


Commuting Ratio Comparison

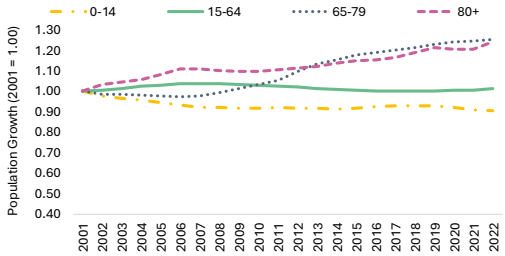


Rhondda Cynon Taf / Rhondda Cynon Taf: Population Profile

MYE Population

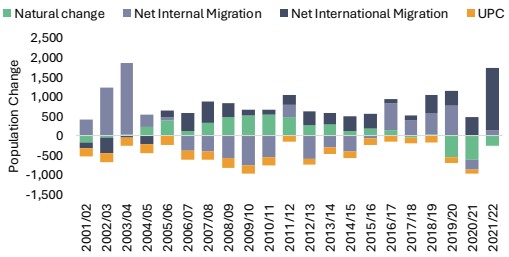


Population Growth Index by Age Group

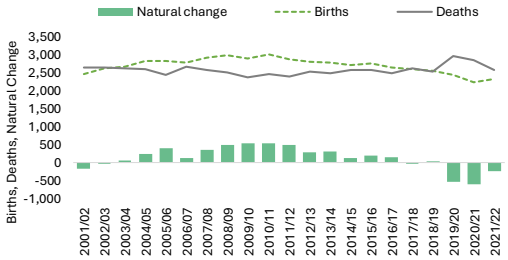


Components of Change

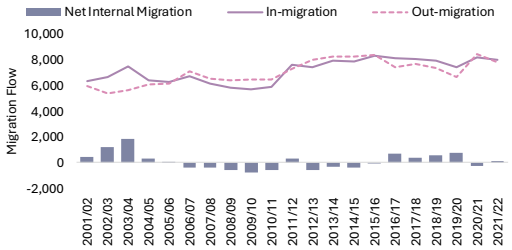
Components of Change



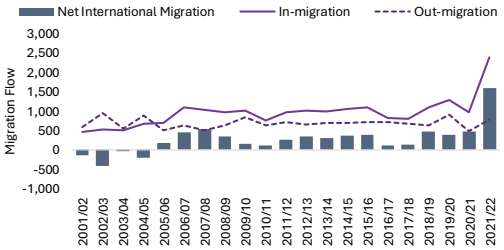
Natural Change



Internal Migration



International Migration

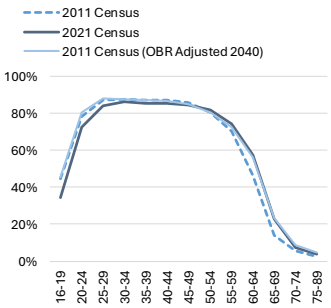


Components Summary: Rhondda Cynon Taf / Rhondda Cynon Taf

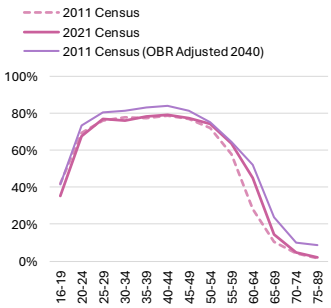
Time period	Births	Deaths	Natural Change	Internal in-migration	Internal out-migration	Net Internal Migration	International in-migration	International out-migration	Net International Migration	UPC
2001–2022	2,698	2,575	123	7,134	7,015	118	960	685	275	-187
2011–2022	2,607	2,597	10	7,868	7,754	115	1,132	696	436	-152
2017–2022	2,422	2,704	-282	7,884	7,561	323	1,304	696	607	-146

Labour Force Summary: Rhondda Cynon Taf / Rhondda Cynon Taf

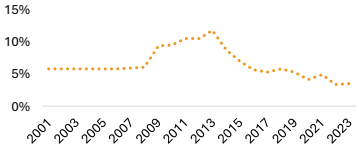
Economic Activity Rates: Males



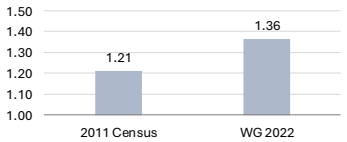
Economic Activity Rates: Females



Unemployment Rate

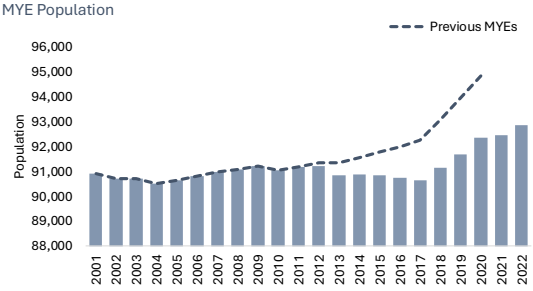


Commuting Ratio Comparison

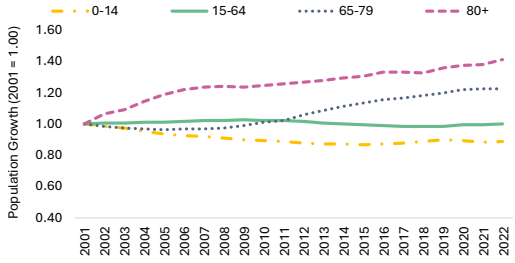


Torfaen / Torfaen: Population Profile

MYE Population

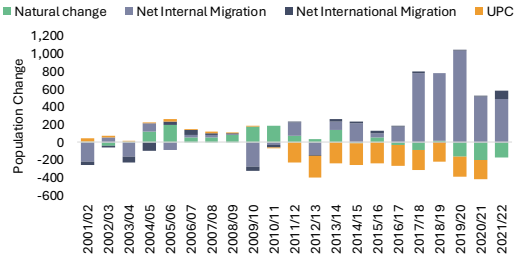


Population Growth Index by Age Group

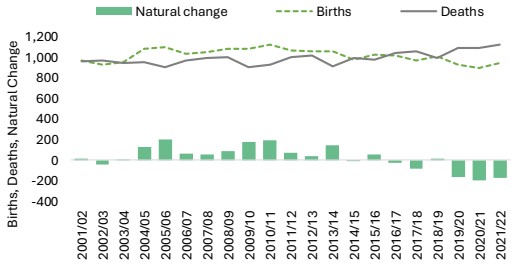


Components of Change

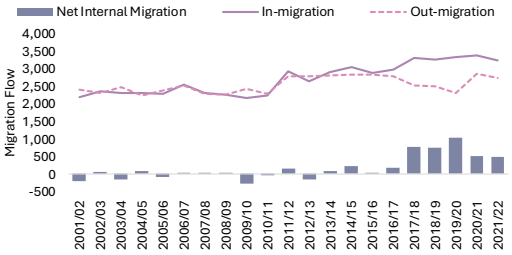
Components of Change



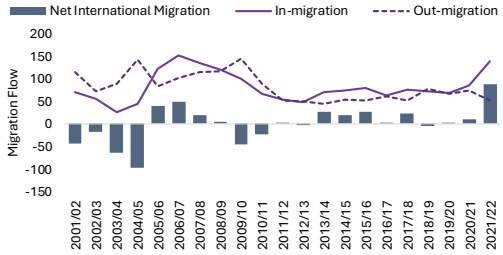
Natural Change



Internal Migration



International Migration

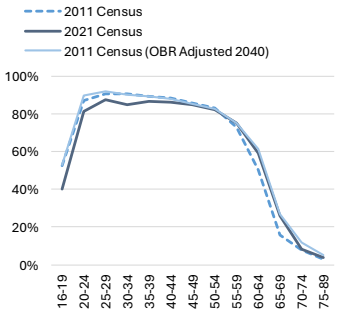


Components Summary: Torfaen / Torfaen

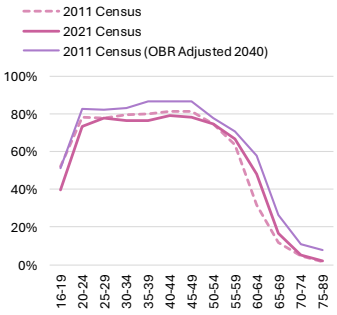
Time period	Births	Deaths	Natural Change	Internal in-migration	Internal out-migration	Net Internal Migration	International in-migration	International out-migration	Net International Migration	UPC
2001–2022	1,016	991	26	2,709	2,540	169	82	81	1	-108
2011–2022	995	1,025	-30	3,082	2,707	375	75	58	18	-232
2017–2022	949	1,070	-121	3,302	2,584	718	88	64	24	-221

Labour Force Summary: Torfaen / Torfaen

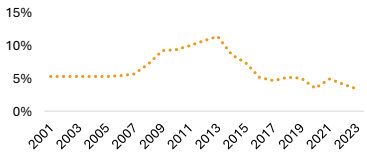
Economic Activity Rates: Males



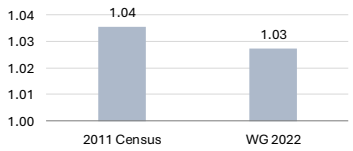
Economic Activity Rates: Females



Unemployment Rate

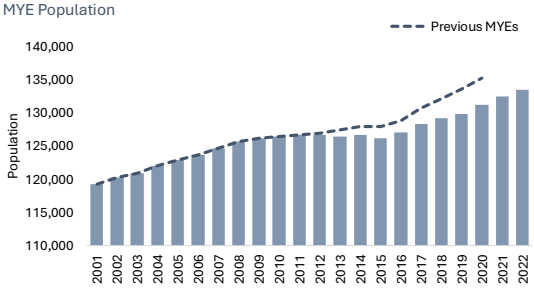


Commuting Ratio Comparison

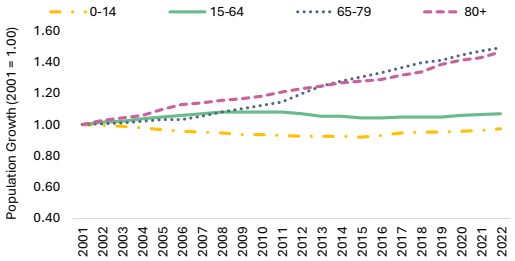


Vale of Glamorgan / Bro Morgannwg: Population Profile

MYE Population

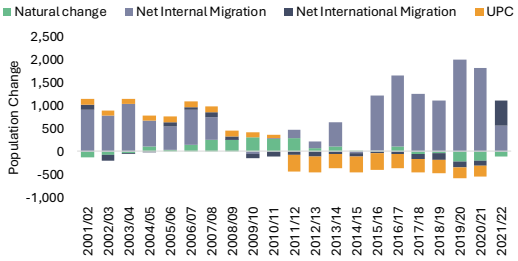


Population Growth Index by Age Group

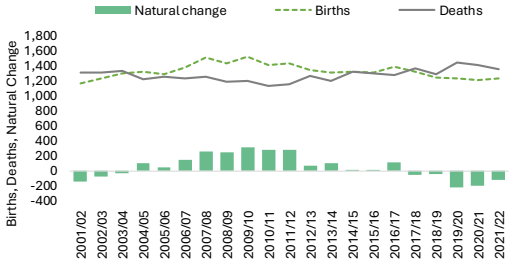


Components of Change

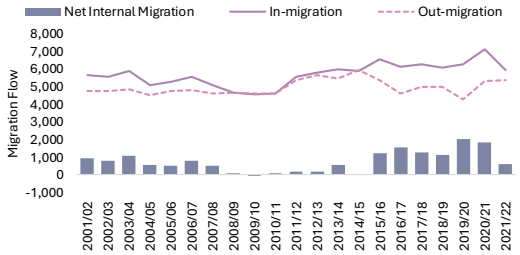
Components of Change



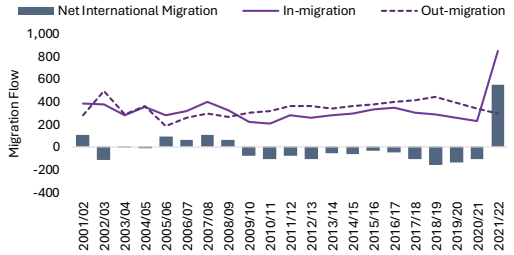
Natural Change



Internal Migration



International Migration

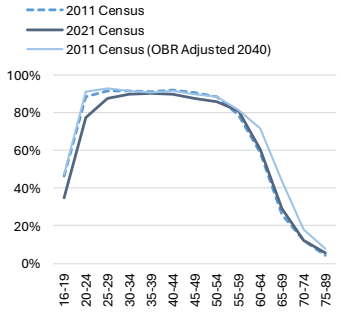


Components Summary: Vale of Glamorgan / Bro Morgannwg

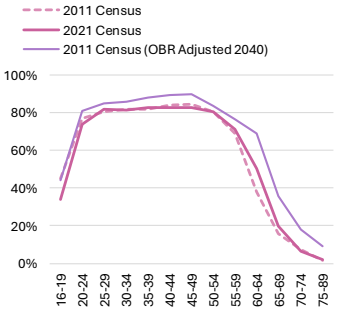
Time period	Births	Deaths	Natural Change	Internal in-migration	Internal out-migration	Net Internal Migration	International in-migration	International out-migration	Net International Migration	UPC
2001–2022	1,326	1,273	52	5,683	4,953	730	326	338	-12	-99
2011–2022	1,301	1,305	-3	6,137	5,199	939	337	370	-33	-311
2017–2022	1,245	1,369	-125	6,332	4,979	1,353	384	377	8	-266

Labour Force Summary: Vale of Glamorgan / Bro Morgannwg

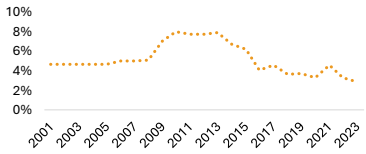
Economic Activity Rates: Males



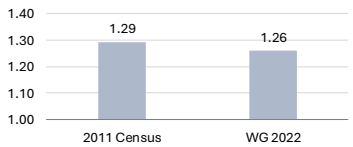
Economic Activity Rates: Females



Unemployment Rate



Commuting Ratio Comparison



Appendix 2: Authority level economic profiles

For each local authority area, a narrative report has been prepared, identifying a 'reasonable level of growth'. Each paper works through the following steps:

(i) Considering the historic trend, overall and by industrial sector

(ii) Identifying a 'baseline' level of growth, through a consistent approach across the region.

(iii) Considering major investment which is coming forward at regional level

(iv) Identifying any further factors which are likely to be relevant to the county

(v) Reconciling the above to identify a broad consensus range.

As set out in the main body of this report, in identifying a "reasonable level" of growth, four points should be noted:

- First, the aim is not to provide a *forecast* level of growth, developed through an econometric model. Instead, the exercise seeks to establish whether, and to what extent, there is a plausible pathway to future jobs growth, taking into account historic trends and indications of future investment.

- Second, this is a high-level study at regional level. It does not take into account a detailed assessment of capacity, and it relies on secondary data and discussions with the local authorities and the CCR City Deal team.

- Third, potential job numbers identified through this study should consequently not be seen as "policy on". Local authorities may have strategic aspirations for higher or lower levels of job growth, informed by a wider range of evidence.

- Fourth, the focus of the exercise is aggregate jobs growth. Economic strategy will also be concerned with productivity, pay and the quality of employment (and these factors may be more important economically). But this is outside the scope of the current work.

Blaenau Gwent

Considering the historic trend

In the 20 years leading up to the pandemic, jobs growth across CCR was significantly stronger than the baseline projection. The picture in Blaenau Gwent was weaker, with substantial contraction in the early 2000s and a more moderate diminution thereafter:

Table 1: Change in jobs, 1999-2019 (average of CE/ Experian/ Oxford estimates)

	Blaenau Gwent		CCR	
	JPA	CAGR, %	JPA	CAGR, %
Change 1999-2009	-273	-1.2	4,226	0.6
Change 2009-2019	-13	-0.1	4,288	0.6
Change 1999-2019	-143	-0.6	4,257	0.6
Total jobs est. 2022	23,036		739,285	

Source: CE/ Experian/ Oxford Economics ; SQW analysis. CAGR = compound annual growth rate. JPA = jobs per annum

Table 2 looks more closely at the recent sectoral dynamics within the jobs market, based on official data. Within the context of overall employment growth, there have been losses in manufacturing (a sector in which the county retains a relative 'over-representation' of employment), offset by gains in public and private sector service activities:

Table 2: Change in jobs by sector, 1999-2019

	1999-2009	2009-2019	1999-2019
Manufacturing	-379	13	-183
Construction	-58	-48	-53
Transport & distribution	38	-33	2
Wholesale & retail	-18	-39	-28
Information & communications	3	2	2
Financial, business & prof services	43	33	38
Public services	180	-25	78
Other	-85	76	-5
Total	-273	-13	-143

Source: CE/ Experian/ Oxford Economics ; SQW analysis. Columns do not sum due to rounding in the sectoral estimates

Identifying a baseline level of growth

Three forecasts were purchased, from Cambridge Econometrics, Experian and Oxford Economics, in November/ December 2023. In the short term (through to 2025), there is considerable divergence between the forecasts, reflecting uncertainty in the light of the long aftermath of the Covid-19 pandemic (which was still relevant in 2022, the last year of 'real' data in the forecast model) and the subsequent energy crisis and conflict in Ukraine.

In the longer term, between 2025 and 2040, there is greater consensus at regional level at the number of jobs per annum that may be achieved. The range for Blaenau Gwent is between growth of 53 jobs per annum and a loss of 92, with an average that is essentially static:

Table 3: Baseline forecasts (jobs per annum, 2025-40)

	Blaenau Gwent	CCR
Cambridge Econometrics	53	3,023
Experian	33	2,520
Oxford Economics	-92	1,773
Average	-2	2,439

Source: CE/ Experian/ Oxford Economics ; SQW analysis

Previous discussion with SEWPG identified the mid-point as representing a reasonable baseline at regional level.

Breaking the baseline forecasts down by broad sectoral group, there is a continued decline in manufacturing employment, with modest growth in other sectors:

Table 4: Sectoral breakdown of baseline forecast

	Blaenau Gwent, total jobs, 2022	Blaenau Gwent, JPA, 2025-40	CCR, JPA, 2025-40
Manufacturing	4,626	-51	-675
Construction	960	0	158
Transport & distribution	535	2	99
Wholesale & retail	3,183	-1	164
Information & communications	133	1	133
Financial, business & professional services	4,040	16	1,022

	Blaenau Gwent, total jobs, 2022	Blaenau Gwent, JPA, 2025-40	CCR, JPA, 2025-40
Public services	6,397	21	914
Other	3,095	9	624
Total	22,969	-2	2,439

Source: Cambridge Econometrics, Experian, Oxford Economics

These baseline forecasts can be compared with earlier forecasts obtained from Oxford Economics as part of the 2019 *Employment Land Study.* These anticipated a net loss of 63 jobs per annum between 2018 and 2033, mostly driven by losses in the manufacturing sector. Although now somewhat dated, they reflect the pessimistic outlook of Oxford Economics' more recent forecasts (while noting that Oxford is generally the most pessimistic of the three forecasting houses).

Prospects for future growth

Analysis informing the RLDP

Blaenau Gwent CBC has a policy aspiration to deliver 3,375 jobs between 2018 and 2033, equivalent to 225 jobs per annum. This is based on a recognition of the need to overcome the county's significant and longstanding economic challenges, manifested in relatively high economic inactivity and a lack of quality employment opportunities[35]. The 225 jobs per annum aspiration is consequently based on reducing out-commuting, increasing the economic activity rate and reducing unemployment, representing a substantial reversal of the historic trajectory and labour demand forecast. This is also consistent with the ambitions of the 2018 *Our Valleys Our Future* plan, which sought to *"close the employment gap between the South Wales Valleys and the rest of Wales"*[36], with the implication that this would require a substantial increase in jobs.

BE Group prepared an *Employment Land Study* in 2019[37]. This modelled the 225 jpa aspiration as a 'policy on' scenario, which supports the allocation of 42 ha of employment land in the RLDP. It also modelled a lower growth scenario, based on the potential 1,500 additional jobs (100 jpa) that could be created as a result of the Ebbw Vale Enterprise Zone (subsequently rebranded as Tech Valleys) over the Plan period.

Recent evidence of demand

In March 2023, BE Group provided an assessment of the impact of wider economic events on the employment land evidence base for Blaenau Gwent. This concluded that *"the*

[35] Described in the RLDP Preferred Strategy, Challenge 1
[36] Welsh Government (2018), *Our Valleys Our Future*
[37] BE Group (2019), *Blaenau Gwent Employment Land Review*

recommendations of the ELS remain appropriate" (other than in respect of a specific site at Tredegar Business Park). In this assessment, BE Group noted that:

- There is a market for local office accommodation, especially to meet micro business needs and especially in serviced offices. But significant growth is unlikely in Blaenau Gwent, given concentration in Cardiff and Newport (which is likely to be persistent despite post-Covid home working trends) and the offer in nearby locations (e.g., Cwmbran, Merthyr).
- There is evidence of industrial demand. Blaenau Gwent has a relative specialism in automotive, although this is vulnerable to global restructuring in the sector, evidenced within the wider region with the closure of Ford at Bridgend, and locally, the decision not to proceed with a major automotive sector investment by TVR in 2023. However, there is diversity in the industrial base, for example in food manufacturing, pharma/ medtech and energy.
- There is potential in warehousing and logistics given A465 link. The report notes that there was an apparent fall in logistics employment in 2021, which was at odds with general perceptions (although it subsequently rebounded in 2022, and it should be noted that survey-based single-year official data is often volatile in small geographies). As noted above, the A465 infrastructure improvements remain relatively recent, and we would not expect all the benefits to have materialised yet.

However, consultation with the local authority highlighted perceptions of emergent growth in micro businesses, reflected in demand for the Council's own smaller industrial stock. Relatively high start-up rates were also cited in the *Employment Land Review*. Demand as evidenced through enquiries is high, especially for industrial space, linked with access to the A465. Ease of access to the Midlands was especially cited as a driver of demand, and some evidence was reported of occupiers considering Blaenau Gwent as a location relative to southern parts of the region due to the pressures on the M4 around Bryn Glas.

More broadly, manufacturing (which remains the dominant local sector) has been resilient in recent years (essentially no change in employment between 2015-22) and including some expansion in existing businesses (e.g., 105 new jobs at Yuasa Battery in Ebbw Vale in 2021). Within the CCR priority sectors, there is a presence in medtech (note, for example, the expansion of PCI Pharma at Tafarnaubach in 2022) and cybersecurity (for example, Thales' Technology Competence Centre at Ebbw Vale). It is plausible that manufacturing may prove more resilient that the baseline forecasts suggest, if the ambitions associated with Tech Valleys come forward.

Major growth opportunities

In that context, the major locations for growth in Blaenau Gwent are the **Ebbw Vale Northern Corridor** (including the Welsh Government's investment at Rhyd-y-Blew) and the further development of **The Works** at Ebbw Vale.

The Works is now well established, with rail access completed prior to the Employment Land Study, although key employment plots remain available at Tech Valleys Business Park and REGAIN2 at the Lime Avenue Business Park. The Works site masterplan is currently being updated for the RLDP and approximately 4 ha of undeveloped land will be allocated for employment. This is expected to come forward in the near future.

In terms of **transport infrastructure**, recent delivery achievements include the completion of the dualling of the A465 from Brynmawr to Gilwern in 2021 (with the final section of improvements to the A465 in Merthyr/ RCT currently underway). Further rail network improvements have seen the introduction of additional services from Ebbw Vale to Newport (in addition to the existing service to Cardiff Central) from early 2024. Given that these significant investments remain relatively recent, the full employment benefits will not yet have emerged in the data.

Major investment at regional level

In addition, there is currently a significant programme of investment in Cardiff Capital Region, including the delivery of the South Wales Metro network and the CCR City Deal's Wider Investment Fund and targeted schemes such as the Northern Valleys Initiative[38]. While this is not necessarily 'additional' to the baseline (since there has been public investment in economic development in the region for many years, and it might reasonably be expected that this would continue in any scenario), the ambitions set out in regional strategy and the 25,000 'jobs target' associated with the City Deal suggest that there is a pathway to above-baseline growth.

Taking 'known' investments to be made through the City Deal and other potential public sector interventions in economic growth suggests potential for around 1,600 additional jobs per annum across the region, although this should be seen as highly indicative. Balancing these by local authority suggests scope for around 87 jobs per annum in Blaenau Gwent[39].

Identifying a reasonable level of growth

There is evidence of recent job creation and investor interest in Blaenau Gwent, and regional investments are likely to have a positive impact. However, this should be seen in the context of a loss of employment over time, and relatively weak (on average) baseline forecasts.

[38] Launched in February 2024, the £50m Northern Valleys Initiative is to drive growth in the Northern Valleys sub-region of CCR. This will cover six Local Authority Partners: Blaenau Gwent, Merthyr Tydfil, Rhondda Cynon Taf, Caerphilly, Torfaen and Bridgend. The programme will support delivery of state-of-the-art infrastructure, cutting edge digital connectivity and stimulate tourism; to encourage private investment, generate jobs and drive prosperity, leaving strong foundations that will ultimately make the region, resilient, less damaging to the environment and more competitive.

[39] Based on assumptions regarding project location (where this is spatially defined) and indicative sectoral distribution of employment.

Achieving the policy aspiration would mean a very substantial reversal of the long-term trend, and it includes some assumptions relating to reduced out-commuting and higher activity rates that are outside the 'labour demand' parameters of this study.

However, the lower growth scenario modelled in the ELS, of 1,500 jobs (100 jpa) is based on likely investment linked with Tech Valleys. Achieving it would still require either a reversal of the trend towards job losses in Blaenau Gwent's relative large manufacturing sector (noting recent resilience, set against some significant structural pressures, especially in areas such as automotive), or higher growth in other sectors (of which there is modest recent evidence). But **100 jobs per annum** appears reasonable as a likely level of demand-led growth.

It should be noted that while 100 jobs per annum appears plausible, and there is a 'pathway' to achieving this based on the parameters considered in this commission, **it is not an 'upper limit':** there are wider policy objectives that the local authority wishes to take into account (such as the need for greater local employment to support higher levels of economic activity), and as noted, the local authority has identified a higher aspirational target to inform the RLDP. This paper is also not based on the full range of analysis that would be considered in a detailed study at local level.

Bridgend

Considering the historic trend

In the 20 years leading up to the pandemic, CCR saw a steady increase in the number of jobs. The profile for Bridgend has been somewhat different, with rapid growth between 2003 and 2007, contraction during the financial crisis and a more stable (net) position thereafter[40].

Table 5: Change in jobs, 1999-2019

	Bridgend		CCR	
	JPA	CAGR, %	JPA	CAGR, %
Change 1999-2009	1,076	1.2	4,226	0.6
Change 2009-2019	-29	0.0	4,288	0.6
Change 1999-2019	523	0.9	4,257	0.6
Total jobs est. 2022	64,941		739,285	

Source: CE/ Experian/ Oxford Economics; SQW analysis. CAGR = compound annual growth rate. JPA = jobs per annum

Table 2 looks more closely at pre-pandemic sectoral dynamics within the jobs market. The early 2000s saw significant losses in manufacturing employment, with the sector shrinking from about 12,300 jobs in 1999 to 8,500 in 2009. Consequently, the manufacturing share of total employment fell from 23% to 13% over the decade. Since then, employment in the sector stabilised, with a slight increase in jobs between 2009 and 2019 (although this will not account for the loss of around 1,700 jobs at Ford's engine plant in Bridgend, which closed in 2020). Manufacturing losses in the early years of the millennium were offset by strong growth in public and private sector services, although growth in these areas has fallen back subsequently.

Table 6: Change in jobs by sector, 1999-2019, jobs per annum

	1999-2009	2009-2019	1999-2019
Manufacturing	-382	15	-183
Construction	153	-85	34
Transport & distribution	32	22	27
Wholesale & retail	193	-7	93
Information & communications	100	96	98
Financial, business & prof services	493	-115	189

[40] Although with year-on-year volatility: the loss of 29 jobs per annum over 2009-19 does not reflect a steady downward trajectory.

	1999-2009	2009-2019	1999-2019
Public services	619	-52	284
Other	-129	79	-25
Total	1,076	-29	523

Source: CE/ Experian/ Oxford Economics; SQW analysis. Columns do not sum due to rounding in the sectoral estimates

Identifying a baseline level of growth

Looking to the future, three forecasts were purchased, from Cambridge Econometrics, Experian and Oxford Economics, in November/ December 2023. In the short term (through to 2025), there is considerable divergence between the forecasts, reflecting uncertainty in the light of the long aftermath of the Covid-19 pandemic (which was still relevant in 2022, the last year of 'real' data in the forecast model) and the subsequent energy crisis and conflict in Ukraine.

In the longer term, between 2025 and 2040, there is greater consensus at regional level at the number of jobs per annum that may be achieved. The range for Bridgend is between 62 and 187 jobs per annum, with an average of 145 (ahead of the rate of jobs growth in the 2009-19 period).

Table 7: Baseline forecasts (jobs per annum, 2025-40)

	Bridgend	CCR
Cambridge Econometrics	187	3,023
Experian	187	2,520
Oxford Economics	62	1,773
Average	145	2,439

Source : CE/ Experian/ Oxford Economics ; SQW analysis

Previous discussion with SEWPG identified the average as representing a reasonable baseline at regional level.

Breaking the baseline forecasts down by broad sectoral group, there is a decline in manufacturing employment (consistent with the baseline picture for CCR as a whole), offset by continued growth in service activities. Despite a decline in employment in recent years, the baseline forecasts anticipate an increase in public service activities, consistent with the longer-term trend:

Table 8: Sectoral breakdown of baseline forecast (based on average of forecasts)

	Bridgend, total jobs, 2022	Bridgend, JPA, 2025-40	CCR, JPA, 2025-40
Manufacturing	8,195	-100	-675

	Bridgend, total jobs, 2022	Bridgend, JPA, 2025-40	CCR, JPA, 2025-40
Construction	4,235	20	158
Transport & distribution	2,708	7	99
Wholesale & retail	9,167	18	164
Information & communications	2,449	34	133
Financial, business & professional services	10,052	66	1,022
Public services	20,029	68	914
Other	8,106	32	624
Total	69,941	145	2,439

Source: CE/ Experian/ Oxford Economics; SQW analysis

It should be noted that there is some variance between the three baseline forecasts in the sectoral composition of growth. For example, Oxford Economics anticipates a slower growth than the other two in public service and financial, professional and business services, and Experian anticipates stronger growth in information and communications. There is however a general consensus across the forecasts on the scale of manufacturing decline, in contrast to the picture across South Wales, where there is greater divergence[41].

These baseline forecasts can be compared with previous forecasts commissioned as part of the *Economic Evidence Base Study* in 2019[42]. This used Experian forecasts, which anticipated 2,400 additional jobs between 2018 and 2033 (i.e., 160 jobs per annum). Future projections can vary substantially between forecasting houses and according to the year of commission, and these earlier forecasts are now somewhat dated. But comparison of the different baseline forecasts does indicate some consensus, albeit that they need to be triangulated with other sources of data.

Prospects for future growth

Bridgend is a well-located county borough, benefiting from its equidistance from Cardiff and Swansea and its location on the M4 and the South Wales Main Line. The *Local Development Plan* describes Bridgend's settlement pattern in terms of seven distinct areas: the town of Bridgend; Pencoed to the east; Pyle, Kenfig Hill and Cornelly to the west, with strong links into Neath Port

[41] In most other local authorities in CCR, Oxford Economics takes a more pessimistic view than Cambridge Econometrics or Experian on the prospects for manufacturing.
[42] Peter Brett Associates (2019), *Bridgend Economic Evidence Base Study*

Talbot; Porthcawl and the coast; the 'Valleys Gateway' just north of the M4; Maesteg and the Llynfi Valley; and the Garw and Ogmore Valleys[43].

As noted above, the economy has historically had a manufacturing orientation, which has included some very large employers (such as Ford and Sony). This has been subject to some restructuring in recent years, alongside an expansion of service sector opportunities. Most economic activity is located in the southeast, around Bridgend, Pencoed and the M4 Corridor, which also contains the major locations for future growth, although the RLDP notes the need for additional economic opportunities in the Llynfi, Garw and Ogmore Valleys, reflecting some of the concentrations of disadvantage in these areas.

As indicated above, recent performance has been mixed. In addition to the losses at Ford, Zimmer Biomet announced its closure in 2023, with the loss of around 530 jobs. There are also likely to be impacts from Tata's restructuring in Port Talbot: the Council estimates around 500 staff living in Bridgend, although there will also be supply chain links.

Economic strategy and jobs target

An *Economic Strategy* for Bridgend was adopted in 2022. This contains an ambition for Bridgend to *"meet its economic potential by ensuring a highly skilled workforce, strong connectivity infrastructure and thriving business culture, whilst [meeting] the wider social needs of all its people and in a sustainable manner"*[44]. It defines four 'pillars' of strategy (business support and workforce development, connectivity and infrastructure, public sector and foundational economy and the low carbon economy).

The *Economic Strategy* also contains a target of 7,500 jobs to be accommodated on major employment land allocations within the LDP. This target is based on a review of employment projections set out in the 2021 *Economic Evidence Base Update,* which considered the of the earlier 2018 Experian baseline forecasts alongside the implications of the closure of the Ford engine plant, and developed a migration scenario which forecast that the growth strategy could support 7,500 additional employed people over the Plan period. This translates into a 'policy on' target of 500 jobs per annum.

Opportunities for growth

Opportunities linked with the major employment sites and industrial demand

Delivery of the major sites identified in the LDP forms a key element of the Economic Strategy. Key locations are defined as: **Bridgend Industrial Estate** to the south of the town centre, and including part of the former Sony factory site; **Waterton Industrial Estate**, also to the south of Bridgend town centre, and principally accommodating manufacturing and logistics operations;

[43] Bridgend CBC, *Bridgend County Borough Local Development Plan 2018-33: Deposit consultation document*
[44] Perform Green/ Bridgend CBC (2022), *An Economic Strategy for Bridgend County Borough*

Brocastle, a strategic development site south of Bridgend Industrial Estate owned by the Welsh Government; **Pencoed Technology Park**; and the former Ford site.

Recent analysis of the local industrial market concluded that *"the market is strong, with the range of national tenants in the vicinity testimony to this…. but the quality of stock on offer in the area is generally mixed, with tenants sometimes settling for buildings of a lower standard than perhaps they would choose otherwise"*. While the loss of large international employers such as Sony, Bayer and Ford had left a gap, it concluded that additional industrial development would be likely to be well-received by both local and inward investors[45].

Officers noted that there is currently an imbalance between the potential jobs that the major strategic sites could deliver and *actual* delivery. It was reported that there is substantial interest from potential occupiers, especially for industrial uses, but that these are constrained by a lack of available supply, even though sites are theoretically available. This was said to be linked with power network capacity issues, as well as a tension between the desire of public sector landowners to hold out for higher value uses in strategic sectors against current demand in the shorter term.

Officers reported that demand for sites and premises is principally industrial and diverse, with recent enquiries relating to furniture manufacturing, car batteries and recycling operation, among others. While manufacturing continues to provide the mainstay for demand, it is it is increasingly SME-dominated. There is also some demand for logistics, linked with Bridgend's position on the M4, although the Council recognises the lower levels of job creation that this is likely to generate. Some demand is also reported for large-scale film studio uses (compatible with CCR's sectoral priorities, although again with lower job densities).

The Council also reported high demand from local small businesses seeking start-up and grow-on space, consistent with the messages elsewhere in the region. Bridgend CBC owns its own stock of small industrial premises, which have a high level of take-up, especially along the M4 (although less so in the Llynfi and Garw valleys.

Other opportunities

Beyond industrial development and the delivery of Bridgend's employment land allocations, the Economic Strategy contains three further 'big projects'. These are:

- The **Bridgend Town Centre Masterplan,** which seeks to revitalise the retail and leisure offering of the town centre, including the relocation of Bridgend College into the town centre and the redevelopment of the area around the rail and bus stations[46]. It should be noted that town centre office demand is generally seen as weak, although there are number of successful edge-of-town locations.

[45] Cooke and Arkwright, quoted in Bridgend CBC (December 2021), *Bridgend Town Centre Regeneration Masterplan*
[46] Bridgend CBC (December 2021), *Bridgend Town Centre Regeneration Masterplan*

- **Porthcawl,** including the forthcoming Porthcawl Waterfront Masterplan, with potential to support some further employment growth in leisure and hospitality.
- **Maesteg Town Hall,** a specific regeneration project. In itself, this is not likely to be a major employment generator, and scope for growth in the Valleys is much lower than elsewhere in Bridgend.

Public sector regeneration investments

There is currently a significant programme of investment in Cardiff Capital Region, including the delivery of the South Wales Metro network, the CCR City Deal's Wider Investment Fund, investment associated with the UK Shared Prosperity Fund and other strategic schemes such as the Investment Zone around Newport. While this is not necessarily 'additional' to the baseline (since there has been public investment in economic development in the region for many years, and it might reasonably be expected that this would continue in any scenario), the ambitions set out in regional strategy and the 25,000 'jobs target' associated with the City Deal suggest that there is a pathway to above-baseline growth. This includes the recently approved Northern Valleys Initiative, which seeks to address the viability constraints in bringing forward key sites, and which will include Bridgend[47].

Addition of the employment potential of regional investments supported by CCR and other public sources suggests scope for around 1,600 jobs per annum over the baseline across the region. While this should be seen as highly indicative, a rough apportionment by local authority accounting for the location and sectoral profile of specific investments suggests *potential* for around 161 jobs per annum in Bridgend (306 if they were to be additional to the baseline set out above). This should be seen as notional, however.

Identifying a reasonable level of growth

This overview demonstrates employment generation potential, albeit within a context of ongoing restructuring. In summary:

- **Baseline** forecasts suggest growth of around **145 jobs per annum** (within a range of between **187 and 62**). An Experian baseline was also commissioned in 2021, which yielded **133 jobs per annum** in 2018-33.
- In the **ten years before the pandemic**, there was an average loss of **29 jobs per annum** were created. But over a 20-year period, there was a gain of 523, reflecting the major manufacturing downturn in recent years.
- The Council's current **jobs target** within the emerging RLDP is **500 jobs per annum**, a 'policy on' target based on assumed workforce growth.

[47] CCR (March 2022), *Seeding a Northern Valleys Initiative*

Triangulating these different sources of intelligence suggest that it would be reasonable to anticipate growth above the baseline. Taking the average of the baseline, the 20-year trend and the Council's target yields 389 jobs per annum, approximated to **400 jobs per annum** Were this to be achieved, it would probably imply a partial reversal of the loss of manufacturing employment (perhaps in the context of the focus in regional strategy on advanced manufacturing, and an effort to address some of the supply constraints that hold back known demand).

It should be noted that while around 400 jobs per annum is reasonable and there is a 'pathway' to achieving it, **it is not an 'upper limit'**: there may for example be wider policy objectives that the local authority wishes to take into account (such as the need for greater local employment to support higher levels of economic activity). It is also not based on the full range of site-by-site evidence and consultation that would be considered in a detailed study at local level.

Caerphilly

Considering the historic trend

In the 20 years leading up to the pandemic, CCR saw a steady increase in the number of jobs. Over the period as a whole, this picture was mirrored in Caerphilly, which saw an initial loss of jobs in the early 2000s, growth until the financial crisis, a slump to 2013 and a return to growth thereafter.

Table 9: Change in jobs, 1999-2019 (average of CE/ Experian/ Oxford estimates)

	Caerphilly		CCR	
	JPA	CAGR, %	JPA	CAGR, %
Change 1999-2009	315	0.5	4,226	0.6
Change 2009-2019	410	0.7	4,288	0.6
Change 1999-2019	362	0.6	4,257	0.6
Total jobs est. 2022	64,706		739,285	

Source: CE/ Experian/ Oxford Economics; SQW analysis. CAGR = compound annual growth rate. JPA = jobs per annum

Table 2 looks more closely at pre-pandemic sectoral dynamics within the jobs market. Manufacturing employment fell quite sharply in the early 2000s, with a loss of some 4,500 jobs between 1999 and 2009. Consequently, the manufacturing share of total employment fell from 29% to 19% over the decade, a pattern consistent with other parts of South Wales. Since then, employment in the sector has stabilised, with net growth in the following decade: currently, Caerphilly has a larger share of employment in manufacturing than any other CCR local authority area[48]. Public services saw rapid growth in the early 2000s before falling back during austerity, with private sector and professional services growing strongly across the period.

Table 10: Change in jobs by sector, 1999-2019 (average of CE/ Experian/ Oxford estimates), jobs per annum

	1999-2009	2009-2019	1999-2019
Manufacturing	-455	130	-162
Construction	-103	-54	-79
Transport & distribution	55	45	50
Wholesale & retail	91	89	90

[48] Caerphilly has a manufacturing location quotient of 2.6, meaning that the sector's share of employment in the county borough is 2.6 times that of its share in the Great Britain economy overall. ONS (2022), BRES.

	1999-2009	2009-2019	1999-2019
Information & communications	18	29	23
Financial, business & prof services	242	161	201
Public services	615	-135	240
Other	-145	143	-1
Total	315	410	362

Source: CE/ Experian/ Oxford Economics; SQW analysis. Note that columns do not sum due to rounding in the sectoral estimates

Identifying a baseline level of growth

Looking to the future, three forecasts were purchased, from Cambridge Econometrics, Experian and Oxford Economics, in November/ December 2023. In the short term (through to 2025), there is considerable divergence between the forecasts, reflecting uncertainty in the light of the long aftermath of the Covid-19 pandemic (which was still relevant in 2022, the last year of 'real' data in the forecast model) and the subsequent energy crisis and conflict in Ukraine.

In the longer term, between 2025 and 2040, there is greater consensus at regional level at the number of jobs per annum that may be achieved, and previous discussion with SEWPG identified the average as representing a reasonable baseline at regional level. However, the range for Caerphilly is quite broad, between growth of 167 jobs per annum and a net loss of 81, with average growth of 66 – much lower than the historic rate of growth.

Table 11: Baseline forecasts (jobs per annum, 2025-40)

	Caerphilly	CCR
Cambridge Econometrics	167	3,023
Experian	113	2,520
Oxford Economics	-81	1,773
Average	66	2,439

Source : CE/ Experian/ Oxford Economics ; SQW analysis

Breaking the baseline forecasts down by broad sectoral group, there is a forecast decline in manufacturing employment (consistent with the baseline picture for CCR as a whole), offset by continued growth in service activities, with the wholesale and retail sector remaining static. Despite the decline in employment in recent years, the baseline forecasts anticipate an increase in public service activities, consistent with the longer-term trend:

Table 12: Sectoral breakdown of baseline forecast (based on average of forecasts)

	Caerphilly, total jobs, 2022	Caerphilly, JPA, 2025-40	CCR, JPA, 2025-40
Manufacturing	11,872	-107	-675
Construction	4,410	5	158
Transport & distribution	1,881	5	99
Wholesale & retail	7,859	11	164
Information & communications	906	5	133
Financial, business & professional services	12,494	61	1,022
Public services	16,577	56	914
Other	8,638	30	624
Total	64,369	66	2,439

Source: CE/ Experian/ Oxford Economics; SQW analysis

It should be noted that there is sharp variance between the three baseline forecasts in the sectoral composition of growth. Oxford Economics anticipates contraction in manufacturing employment at almost eight times the level of that forecast by Experian (a net loss of 212 jobs per annum, compared with 27), as well as contraction in public services (compared with strong growth forecast by the other two. The average of the forecasts therefore masks divergence in the forecasting houses' assumptions, to a greater extent in Caerphilly than is the case elsewhere in the region.

These baseline forecasts can be compared with two further labour demand forecasting exercises commissioned in recent years:

- Caerphilly's *Employment Land Review*, completed in 2021, used forecasts from Oxford Economics, which anticipated a net loss of 1,355 jobs between 2020 and 2035 (i.e., a loss of 90 jobs per annum), mostly driven by a sharp decline in manufacturing (and to a much lesser extent, public administration, offset by growth in business services and health[49].
- An earlier set of forecasts were also commissioned from Oxford Economics to inform the *Larger than Local Regional Employment Study*, prepared on behalf of Caerphilly and neighbouring Gwent authorities in 2019/20[50]. These anticipated a net loss of 175 jobs per annum between 2018 and 2040, again mostly driven by manufacturing.

[49] BE Group (November 2021), *Caerphilly CBC Employment Land Review*
[50] BE Group (March 2020), *Larger than Local Regional Employment Study*

The Oxford forecasts are consistent in their view of net contraction over time, albeit that they have become somewhat more 'optimistic' over successive vintages. However, the variance with the other forecasting houses is worth noting: Oxford's forecasts also anticipate growth in the short term followed by contraction, reflecting the demographic assumptions within the model. This highlights the extent to which future projections vary between forecasting houses and according to the year of commission, and the need to consider them in conjunction with other forms of evidence.

Prospects for future growth

Major locations for growth

The development strategy set out in the existing LDP defines the county borough of Caerphilly as containing three broad areas: the Heads of the Valleys Regeneration Area (broadly extending south from the A465 and including Rhymney and Bargoed); the 'Northern Connections Corridor' in the centre of the county borough, including Ystrad Mynach, Blackwood and Newbridge); and the Southern Connections Corridor, including Caerphilly town and Risca[51]. Within there are several major known locations for growth (including those which are underway, but which have not yet delivered their full potential in terms of employment growth).

Heads of the Valleys Regeneration Area

The Heads of the Valleys Regeneration Area has seen significant investment in recent years, notably through improvements to the A465 Heads of the Valleys Road, which remain underway. In 2020, a *Heads of the Valleys Regeneration Area Masterplan* was prepared, which seeks to build on this investment to "complement and strengthen employment opportunities in the area". This includes developing a strategic employment function for Rhymney, establishing it as a 'gateway to the Valleys', and seeking to complement the Tech Valleys initiative in neighbouring Blaenau Gwent[52]. The area includes a substantial industrial estate (Heads of the Valleys Industrial Estate) at Rhymney, with the potential to benefit from the A465 infrastructure improvements and scope for expansion. More broadly, the masterplan also highlights evidence of demand for start-up and smaller units.

Northern Connections Corridor

The Northern Connections Corridor contains the county borough of Caerphilly's largest industrial locations, with good east-west links via the A472 towards Cwmbran/ Pontypool and Pontypridd.

Larger locations for growth include **Oakdale Business Park,** currently the largest employment allocation in the county borough. Located on a former colliery site over a series of development plateaux, Oakdale currently accommodates a number of major manufacturers, including

[51] Caerphilly County Borough Council (2010), *Caerphilly County Borough Local Development Plan up to 2021*, p.26
[52] Caerphilly CBC (November 2020), *Heads of the Valleys Regeneration Area Masterplan*

General Dynamics, ThermoFisher Scientific and BBI Solutions. There is remaining land availability, with evidence of occupier interest, and the Welsh Government is investing in infrastructure. Within the 2020 *Larger than Local Report,* Oakdale Business Park was identified as a 'recommended strategic employment site' of regional significance[53]. Other major employment locations in the Northern Connections Corridor include **Penyfan** at Croespenmaen (which is close to and complementary with the Oakdale plateaux, with potential expansion land); and the **Tredomen** office park near Ystrad Mynach.

Southern Connections Corridor

In the southern part of the county borough, there are fewer major sites for employment growth, with the 2022 *Annual Monitoring Report* noting that *"land availability within the Caerphilly Basin is very limited. Whilst there is some opportunity for redevelopment on existing industrial estates, the lack of any significant sites for employment growth is a concern from a strategic and long-term perspective"*[54].

Town centres

Traditionally, employment in the town of Caerphilly has been quite widely distributed, reflecting the development of business parks on former mining and other industrial sites. However, the Council's 'town centres first' policy has led to a masterplan for Caerphilly town, which focuses on developing its cultural and commercial offer, with scope to grow employment in the hospitality and tourism sectors. Adjacent to the new transport interchange in Caerphilly town, work is also underway to develop a Leisure and Wellbeing Centre close to the town centre, increasing the diversity of uses in the town.

Public sector regeneration investments

There is currently a significant programme of investment in Cardiff Capital Region, including the delivery of the South Wales Metro network, the CCR City Deal's Wider Investment Fund, investment associated with the UK Shared Prosperity Fund and other strategic schemes such as the Investment Zone around Newport. While this is not necessarily 'additional' to the baseline (since there has been public investment in economic development in the region for many years, and it might reasonably be expected that this would continue in any scenario), the ambitions set out in regional strategy and the 25,000 'jobs target' associated with the City Deal suggest that there is a pathway to above-baseline growth.

Of particular relevance to Caerphilly County Borough, key investments include:

[53] BE Group (March 2020), *Larger than Local Regional Employment Study,* p130
[54] Caerphilly CBC (2022), *Annual Monitoring Report 2022*, p.30

- The recently approved **Northern Valleys Initiative**, which seeks to address the viability constraints in bringing forward key sites[55], and the **Strategic Premises Fund**, which aims to support speculative development in employment space

- Significant investment in the **compound semiconductor industry** at Newport. Although the 'core' of this is outside the county borough, functional links between Caerphilly, Newport and Cardiff are strong, and there ought to be connections to the county borough's wider manufacturing potential[56].

- The **Metro**, which will deliver improved services on the Rhymney Valley line, with four trains per hour between Cardiff and Rhymney and greater reliability. Work is also well advanced on improvements to the Ebbw Vale line (via Risca and Newbridge), providing direct services to Newport, as well as to Cardiff. While Metro investment is often seen as principally benefiting residents by providing better access to job opportunities in Cardiff, there ought to be scope for more economic activity locally, especially around the main transport intersections, and in Caerphilly town, the Metro investment is complemented by the Caerphilly Interchange project, improving local accessibility.

Addition of the employment potential of regional investments supported by CCR and other public sources suggests scope for around 1,600 jobs per annum over the baseline across the region. While this should be seen as highly indicative, a rough apportionment by local authority accounting for the location and sectoral profile of specific investments suggests *potential* for around 173 jobs per annum in Caerphilly County Borough (239 if they were to be additional to the baseline set out above). This should be seen as notional, however[57].

Wider perspectives on demand

Local authority officers reported a steady stream of investment enquiries. These mostly reflect the county borough of Caerphilly's traditional manufacturing orientation, indicating that despite the negative view in the baseline forecasts, there is still significant growth potential. However, officers noted vulnerabilities within the sector, noting that it is "relatively labour intensive" and traditional, and perhaps still reliant on low development and labour costs. This could present a long-term challenge in terms of decarbonisation and resilience to wider economic change. Nonetheless, the county borough does accommodate a number of advanced manufacturing businesses, with recent enquiries from medtech and pharma firms.

Demand was said to be strong from smaller firms seeking start-up and grow-on space, reflecting similar views expressed in other Valleys authorities. The ELR noted the speed with which modern

[55] CCR (March 2022), *Seeding a Northern Valleys Initiative*
[56] Likewise, the strategic focus on medtech/ life sciences, which also have a presence (mainly manufacturing-related) in Caerphilly.
[57] A further scenario was also developed that adjusted for reduced job losses (relative to the baseline in manufacturing, and higher growth to reflect the recent historic trend in business and professional services. This yielded 256 jobs per annum in Caerphilly CBC, although there is likely to be some double counting of the potential regional investments within this.

smaller industrial units were taken up on the Welsh Government's Ty Du site south of Nelson, observing that *"the scale of interest shown at Ty Du could have delivered three times the level of floorspace provided at the site"*[58]. Of Caerphilly CBC's own stock of premises, about 90% are occupied, and there are similar occupancy rates on premises managed by Business in Focus. The county borough also has some specialist facilities oriented to smaller tech sector businesses (for example, the Welsh ICE coworking centre on Caerphilly Business Park), which have the potential to grow in the context of proximity to Cardiff and the growth of the sector regionally.

Reflecting high demand for smaller units, there has recently been a trend towards the acquisition and repurposing of larger factories for conversion into smaller units. In the south and centre of the county borough, projects such as these have come forward commercially and without public sector intervention, although there are still some viability challenges in the Heads of the Valleys.

Second Replacement Local Development Plan employment growth target and economic growth strategy

Jobs target

The Council has identified a jobs target for 2020-35 of 3,876 (258 jobs per annum). This is explained in the *Employment Background Evidence Paper*, which states that it is based on the increase in the working age population that would be required to support the CCR regional target of 25,000 additional jobs[59]. In other words, the strategy is to increase the working age population, through greater retention and in-migration than experienced previously, which will then support additional employment and enable Caerphilly County Borough to contribute to regional growth. The target is therefore much higher than the baseline forecasts.

Economic strategy

The current economic strategy for Caerphilly County Borough, *A Foundation for Success*, was adopted in 2018. Priorities include (inter alia), 'building a more resilient and diversified economy' (SB1), 'supporting economic growth and innovation' (SB2), and 'key sites and infrastructure for employment opportunities' (SB4). The latter notes that "*Industrial demand continues to outpace office demand. There is a need therefore to recognise the redundancy of poor quality employment sites and premises and to encourage the recycling/redevelopment of less suitable older stock (particularly that owned by the private sector) to make way for premises better suited to meet modern requirements"*[60]. A new strategy is currently being prepared.

More recently, the proposed economic vision for the 2RLDP seeks to balance manufacturing strengths with diversification:

[58] BE Group (November 2021), *Caerphilly CBC Employment Land Review*, p.115
[59] Caerphilly CBC (October 2022), *PS14: Employment Background Evidence Paper*
[60] Caerphilly CBC (July 2018), *A Foundation for Success: Regeneration Strategy 2018-23*

"Caerphilly County Borough will develop its historic manufacturing base to become a natural choice within the Cardiff Capital Region for a diverse, mutually inclusive and resilient mix of businesses, social enterprises and locally orientated entrepreneurs, through the following means:

- *Optimising its location within the Cardiff Capital Region through the improvement of public transport connectivity at the regional, local and community levels, while recognising the importance in business terms of existing highway links*
- *Enhancing the flexibility and choices available to businesses through the provision and safeguarding of appropriately located, deliverable sites*
- *Ensuring the provision of sites for complementary uses, including housing and town centre-related development, through their allocation in the 2RLDP"*

Identifying a reasonable level of growth

This overview demonstrates a mixed picture in respect of future employment growth in Caerphilly County Borough. In summary:

- **Baseline** forecasts suggest growth of around **66 jobs per annum** (within a wide range of between **167 and -81**). Earlier baseline projections purchased to inform the ELR and *Larger than Local Study* are both negative (in fact, *more* negative than the more pessimistic of the three forecasts used for this study.
- In the **ten years before the pandemic**, an average **410 jobs per annum** were created. Over a 20-year period, this falls to 362, mainly accounted for by losses in manufacturing.
- The Council's current **jobs target** within the emerging 2RLDP is **258 jobs per annum**, based on population growth to enable the regional 25,000 jobs target to be achieved.
- Beyond these numbers, there is evidence of investor demand, unmet by supply, especially in relation to smaller employers, and there is scope for Caerphilly to benefit from regional scale investment which has not yet come to fruition.

There is not much consensus across baseline and historic figures. However, triangulating these different sources of intelligence suggest that it would be reasonable to anticipate growth above the baseline. Taking a mid-point between the average baseline estimate (66 jobs per annum) and the ten-year historic trend (410) yields **238 jobs per annum**, which is almost exactly the same as the notional gain from City Deal and regional investment and is broadly in line with the 2RLDP target. Were this to be achieved, it would probably imply a continued manufacturing resilience, and an effort to address some of the supply constraints that hold back known demand. It might also suggest further benefits from transport infrastructure improvements than are currently visible in the data.

It should be noted that while around 238 jobs per annum is reasonable and there is a 'pathway' to achieving it, it is not an 'upper limit': there may for example be wider policy objectives that the local authority wishes to take into account (such as the need for greater

local employment to support higher levels of economic activity). It is also not based on the full range of site-by-site evidence and consultation that would be considered in a detailed study at local level.

Cardiff

Considering the historic trend

In the 20 years leading up to the pandemic, CCR saw a steady increase in the number of jobs. Cardiff saw consistently higher growth than the rest of the region throughout this period. Consequently, the city's share of the total number of jobs in the region rose from 29% in 1999 to 32% in 2009 and 33% in 2019. Despite a fall in job numbers in 2020, there was also a strong rebound after the pandemic

Table 13: Change in jobs, 1999-2019

	Cardiff		CCR	
	JPA	CAGR, %	JPA	CAGR, %
Change 1999-2009	3,191	1.6	4,226	0.6
Change 2009-2019	2,046	0.9	4,288	0.6
Change 1999-2019	2,618	1.3	4,257	0.6
Total jobs est. 2022	247,724		739,285	

Source: CE/ Experian/ Oxford Economics; SQW analysis. CAGR = compound annual growth rate; JPA = jobs per annum

Table 2 looks more closely at pre-pandemic sectoral dynamics within the jobs market. Public services activity accounted for almost half of total net growth in 1999-2009. It remained a significant driver of growth in the following decade, albeit at a slower rate. Private sector services have also expanded: looking at more granular data than presented in Table 2 for the period since 2015, information and communications, finance and insurance and real estate all saw high levels of growth: all of these are sectors which are relatively 'over-represented' in Cardiff. Accommodation and food service also grew strongly[61].

This has been offset by significant losses in manufacturing employment, with the sector shrinking from about 16,000 jobs in 1999 to fewer than 10,000 in 2019 (with a halving in the sector's share of total employment from 8% to 4%). Transport and logistics, construction and retail and wholesale activity also saw a fall in employment in the decade to 2019, reversing some previous gains.

[61] The location quotients* in 2022 for these sectors were as follows: Information and communications: 1.1; finance and insurance: 2.3; real estate: 1.1. Other larger sectors in which Cardiff is relatively 'over-represented' were public administration and defence (2.0), education (1.2), arts, entertainment and recreation (1.3) and 'other service activities' (1.4), all of which have seen employment growth since 2015.
(* the location quotient is a measure of relative concentration. Sectors with a LQ of greater than 1 account for a greater share of total employment in Cardiff than they do in Great Britain as a whole).

Table 14: Change in jobs by sector, 1999-2019, jobs per annum

	1999-2009	2009-2019	1999-2019
Manufacturing	-538	-68	-303
Construction	287	-258	15
Transport & distribution	202	-205	-2
Wholesale & retail	318	-117	101
Information & communications	39	332	185
Financial, business & prof services	1,271	701	986
Public services	1,562	828	1,195
Other	53	839	446
Total	3,191	2,046	2,618

Source: CE/ Experian/ Oxford Economics; SQW analysis. Columns do not sum due to rounding in the sectoral estimates

Identifying a baseline level of growth

Looking to the future, three forecasts were purchased, from Cambridge Econometrics, Experian and Oxford Economics, in November/ December 2023. In the short term (through to 2025), there is considerable divergence between the forecasts, reflecting uncertainty in the light of the long aftermath of the Covid-19 pandemic (which was still relevant in 2022, the last year of 'real' data in the forecast model) and the subsequent energy crisis and conflict in Ukraine.

In the longer term, between 2025 and 2040, there is greater consensus at regional level at the number of jobs per annum that may be achieved. The range Cardiff is between 1,233 and 1,340 jobs per annum, with an average of 1,300. While there is reasonable consensus across these numbers, they are substantially below the 10- and 20-year historic growth rates.

Table 15: Baseline forecasts (jobs per annum, 2025-40)

	Cardiff	CCR
Cambridge Econometrics	1,327	3,023
Experian	1,233	2,520
Oxford Economics	1,340	1,773
Average	1,300	2,439

Source : CE/ Experian/ Oxford Economics ; SQW analysis

Previous discussion with SEWPG identified the average as representing a reasonable baseline at regional level. As can be seen from Table 3, the average anticipates that Cardiff will account for

some 53% of total jobs growth in the region between 2025 and 2040. This will mean that its share of all jobs in the region will continue to increase, to 35% in 2040.

Breaking the baseline forecasts down by broad sectoral group, there is a further decline in manufacturing employment (consistent with the baseline picture for CCR as a whole), offset by continued strong growth in services[62]:

Table 16: Sectoral breakdown of baseline forecast (based on average of forecasts)

	Cardiff, total jobs, 2022	Cardiff, JPA, 2025-40	CCR, JPA, 2025-40
Manufacturing	9,726	-101	-675
Construction	11,525	68	158
Transport & distribution	5,711	17	99
Wholesale & retail	26,809	89	164
Information & communications	13,524	47	133
Financial, business & professional services	68,030	553	1,022
Public services	75,199	335	914
Other	37,200	292	624
Total	247,724	1,300	2,439

Source: CE/ Experian/ Oxford Economics; SQW analysis

Although the forecasts broadly align on overall job numbers, there is some variance between in the sectoral composition of growth. For example, Oxford Economics anticipates a much sharper contraction in manufacturing employment, offset by stronger growth in construction, wholesale and retail and financial, business and professional services.

These baseline forecasts can be compared with earlier projections used to inform Cardiff's *Employment Land and Premises Study* (ELPS), completed in 2022[63]. This used two sets of baseline forecasts:

- Oxford Economics anticipated total employment growth of 21,100 between 2021 and 2036 (i.e., 1,094 jobs per annum), with growth especially concentrated in health, administrative and professional services and retail, and with continued contraction in manufacturing.

[62] Including hospitality, leisure and arts and entertainment, which are included in 'Other'.
[63] Hardisty Jones Associates (July 2023), *Cardiff Employment Land and Premises Study*

- Experian anticipated growth of 45,500 jobs over the same period (2,347 jobs per annum). The sectoral distribution was largely the same to that profiled by Oxford, albeit with stronger growth across most sectors, especially health, education, professional services and accommodation and food service, and a smaller contraction in manufacturing.

Based on these forecasts, the ELPS ran a series of scenarios, adjusting for alternative sector growth assumptions. This yielded a range of between 1,300 and 3,100 jobs per annum between 2021-36.

Clearly, there is great variance within these scenarios and the later projections commissioned for this study. This highlights the extent to which future projections vary between forecasting houses and according to the year of commission, and illustrates the need to triangulate forecast data with other sources of intelligence.

Prospects for future growth

Cardiff is the principal economic hub and employment location for South Wales and is a major government, media, educational and cultural hub. This role has expanded in recent years, as the city's increasing share of regional employment implies, and Cardiff is an important employment destination for workers across CCR. The ELPS noted that Cardiff had performed well in economic terms over the 15 years to 2022, exceeding the jobs growth target of 2,000 jobs per annum set out in the previous Local Development Plan. Consequently, the ELPS considered that *"on the basis of its role as an economic hub, a capital city and its strong historic performance, it is appropriate to plan for its continued growth, particularly given existing planned infrastructure and other investments".*

Major strategic locations for growth

Cardiff Council launched an economic strategy, *Building More and Better Jobs*, in 2019. This identified sectoral opportunities associated with the growth of financial services and fintech, cybersecurity and 'reg-tech', compound semiconductors, creative and media industries, and life sciences, all of which are relevant to the priorities set out in CCR's *Regional Economic and Industrial Plan*[64].

In spatial terms, *Building More and Better Jobs* identified five priorities, linked with the city centre, Cardiff Bay, Cardiff East, a northern 'Knowledge Corridor' and opportunities associated with the city's sports and cultural offer. While a further economic strategy was subsequently adopted to support recovery from the Covid-19 pandemic, the broad spatial priorities in *Building More and Better Jobs* remain relevant, and the city's key opportunities are set out below under the five priority headings.

[64] Cardiff Council (2019), Cardiff's economic strategy published (press release)

City centre

The major focus of new development in the city centre is the **Cardiff Central Enhancement Programme (CCEP)**, focused on bringing forward a series of major sites, linked with the programme of capacity, interchange and public realm improvements to Cardiff Central station known as Metro Central.

Earlier phases of delivery have brought forward development around Central Square, including the BBC Wales, HMRC and Legal and General buildings. The Capital Quarter mixed-use development adjacent to Callaghan Square is also underway.

Future development which will impact on employment growth includes:

Table 17: Future development linked with Cardiff Central Enhancement Programme

Scheme	Description	Potential jobs[65]	Status
Canal Quarter	Redevelopment of Motorpoint Arena and area between Bute Terrace and Churchill Way to create mixed use (residential/ office/ hotel/ F&B) development	7,400	Initial public realm work complete; commercial development not yet progressed
Capital Quarter	Office/ hotel/ student accommodation on Tyndall Street	10,200	Underway; part complete
Central Quay	Mixed-use scheme on the former Brains Brewery site southwest of Central Station	1,700	Underway
Callaghan Square	Development of the final parcel of land at Callaghan Square, south of Central Station	3,700	Not yet developed
The Embankment	Mixed-use scheme at Dumballs Road, between Central Station and Butetown; c.54,000 sq m business space	5,600	Not yet developed
Titan House	Further development at Ocean Park, southeast of city centre	1,100	Not yet developed

Source: Cardiff Council (February 2023), Cardiff Central Enhancement Update

Although the jobs figures associated with these sites are estimates of capacity, rather than estimates of the number of 'net additional' jobs that are likely to be created, they give an indication of the scale of potential growth that is likely to come forward in the next few years, as the city's core business district extends south of the railway line.

[65] Based on a jobs density calculation, and related to capacity for jobs accommodated. Job numbers from Cardiff Council (February 2023), *Cardiff Central Enhancement Update*, rounded to nearest 100. They are not intended to indicate net additional employment to the city.

Cardiff Bay

The key strategic regeneration project in Cardiff Bay is the redevelopment of **Atlantic Wharf**, which includes a new 15,000-seat indoor arena (to be delivered as part of the first phase), hotel, cultural amenities and office space, as well as a new transport hub linked with the extension of the Metro (see below).

Cardiff East

The major proposed development in the east of the city is the **Hendre Lakes,** a proposed business district to the south of the existing St Mellons Business Park. This is cited as having the potential to deliver around 6,000 new jobs, and is intended to incorporate a new **Cardiff Parkway** station between Cardiff Central and Newport. Planning applications for the Parkway and Hendre Lakes were submitted in 2021; while Cardiff Council resolved to approve the Parkway application in 2022, further hearings are underway to ensure compliance with Welsh Government policy.

Cardiff North

Significant development has taken place in recent years in bringing forward Cardiff University's new campus on Maindy Road. Further north, the major opportunity still to be taken forward is the development of **Cardiff Edge**, an 11-hectare research and development campus on the former GE site at Forest Farm (M4 Junction 32). The site offers potential for life science occupiers, recognising Cardiff's strengths in this area (and major medical development in the vicinity, including current investment in the nearby Velindre specialist cancer hospital).

Other opportunities

Alongside these core growth locations, *Building More and Better Jobs* set a fifth priority, to "continue our sporting and cultural renaissance". While this obviously relates to the plans for Atlantic Wharf and the regeneration of the city centre, the key additional development opportunity is the completion of the **International Sports Village** south of Ferry Road. The Council acquired the site in 2022 to accelerate development, with the aim of *"completing a leisure attraction to support Cardiff Bay as a premier leisure destination"*[66], with improved transport links across the rest of the Bay and into the city centre. From an employment perspective, the main opportunities are likely to be in leisure and hospitality activities.

Employment growth elsewhere in the city is likely to be more incremental. However, there will also be service jobs associated with Cardiff's residential expansion, such as within the large urban extension to the northwest of the city.

[66] Cardiff Council (July 2023), Cabinet Report: International Sports Village

Strategic transport investment

The major developments cited above are integrally linked with significant investment in transport infrastructure, at the core of which is the development of the **South Wales Metro**, which includes a programme of enhancements to the existing rail network and plans for further extensions. The Metro will greatly improve access to Cardiff city centre from the Valleys, increasing its viability and attractiveness as a commuter destination. Key projects relevant to Cardiff include:

- Metro Central, as described above, providing increased rail capacity and a transport interchange, at the centre of the wider regeneration of the south side of the city centre
- Metro-standard frequency between Cardiff Central and Pontypridd (i.e., via Cathays, Llandaff and Radyr), improved frequencies on the Rhymney Line and direct trains from the Valleys to Cardiff Bay
- Additional planned stations at Butetown and Crwys Road (in addition to the new Parkway station at Cardiff East on the mainline)

In addition, funding has been secured for the first phase of the **Cardiff Crossrail** tram link from Cardiff Central to Cardiff Bay via Callaghan Square, contributing to the delivery of the Atlantic Wharf masterplan.

Looking to the longer term, there are extensive plans for the expansion of the city's transport infrastructure, including the extension of Crossrail to Pierhead Street and beyond, additional stations (e.g., at Gabalfa and Ely Mill) and improvements to the City and Coryton lines. This investment in transport forms an important part of the city's wider economic strategy, as well as that of the region as a whole[67].

Regional investment sources

There is currently a significant programme of public sector in Cardiff Capital Region. In addition to the delivery of the Metro network described above, this includes the CCR City Deal's Wider Investment Fund, investment associated with the UK Shared Prosperity Fund and other strategic schemes such as the Investment Zone around Newport. While this is not necessarily 'additional' to the baseline (since there has been public investment in economic development in the region for many years, and it might reasonably be expected that this would continue in any scenario), the ambitions set out in regional strategy and the 25,000 'jobs target' associated with the City Deal suggest that there is a pathway to above-baseline growth. Key investments especially relevant to growth in Cardiff include Metro Central and those sectorally-focused programmes that relate to the city's key growth industries

Addition of the employment potential of regional investments supported by CCR and other public sources suggests scope for around 1,600 jobs per annum over the baseline across the

[67] Cardiff Council (n.d.), *Cardiff's Transport White Paper: Changing how we move around a growing city*

region. While this should be seen as highly indicative, a rough apportionment by local authority accounting for the location and sectoral profile of specific investments suggests *potential* for around 256 jobs per annum in Cardiff (1,556 if they were to be combined with the baseline set out above). This should be seen as notional, however.

Wider perspectives on demand

The ELPS noted take-up of office space concentrated in technology, media and telecoms, business services, public services, education and health and insurance and finance, consistent with the growth sectors identified in strategy. Related to these areas of strength, PwC also announced a major investment in a technology and cybersecurity hub in the city, potentially supporting around 1,000 jobs[68]. Beyond 'conventional' office uses, the ELPS also highlighted growth in demand for flexible workspace, noting for example the growth of Tramshed Tech in Grangetown.

Produced in the immediate aftermath of the Covid pandemic, the ELPS reported some market caution, noting developer decisions at the time to put some schemes on hold, and uncertainty regarding the future of demand in edge-of-town locations, such as Cardiff Gate. However, more recent analysis of the city centre market notes a return to positive net absorption in 2022 and 2023, and falling vacancy rates for Grade A office stock[69].

The ELPS also noted increasing demand for good-quality light industrial and warehouse accommodation, highlighting *"the unfit-for-purposeness of the existing stock and the impending redundancy of currently occupied assets".* The study noted most demand for smaller (below 3,000 sq ft) units, recognising the barriers presented by the Bryn Glas tunnels to the attractiveness of larger distribution operations in the city.

Replacement Local Development Plan employment growth target

The Council's current jobs target within the Preferred Strategy is stated as 32,000 jobs between 2021 and 2036 (i.e., 2,153 jobs per annum). This is based on a dwelling-led scenario, based on the delivery of 1,600 homes per annum over the Plan period, which would represent an increase in housing completions over the previous decade.

Identifying a reasonable level of growth

This overview demonstrates a strong recent employment growth in Cardiff and a positive outlook for the future:

[68] PwC, October 2023
[69] Savills (February 2024), *Cardiff Central Enhancement Programme: Wider Land Value Uplift Study*

- **Baseline** forecasts suggest growth of around **1,300 jobs per annum** (within a range of between **1,233** and **1,340**). While these broadly align, two previously commissioned baseline forecasts for the EPLS anticipate growth of 1,094 and 2,347 jobs per annum respectively.
- **Adjusted scenarios** run for the ELPS in 2021, give a range of between **1,300 and 3,100** jobs per annum
- In the **ten years before the pandemic**, an average **2,046 jobs per annum** were created. Over a 20-year period, the average was **2,618**, partly due to higher public sector employment growth in the early 2000s.
- The Council's current **jobs target** within the emerging RLDP is **2,153 jobs per annum**, based on a dwelling-led scenario.

There is also evidence of a strong pipeline of major schemes that are likely to generate additional employment activity over time. This includes some developments that are underway, but which will not yet have generated additional jobs in the data. While the Covid-19 pandemic did impact Cardiff's economy significantly, given its orientation to city centre office-based activities and the leisure economy, there is evidence of a return to confidence, and recent official data indicates employment growth of about 5% between 2020 and 2022[70].

Triangulating these different sources of intelligence suggest that it would be reasonable to anticipate growth above the baseline. For a reasonable estimate, the mid-point between the ten-year historic trend and the average of the ELPS growth scenarios (which adjust for different sectoral assumptions) is **2,173**, which essentially aligns with the Council's jobs target.

It should be noted that while around 2,173 jobs per annum is reasonable and there is a 'pathway' to achieving it, it is not an 'upper limit': there may for example be wider policy objectives that the local authority wishes to take into account (such as the need for greater local employment to support higher levels of economic activity). It is also not based on the full range of site-by-site evidence and consultation that would be considered in a detailed study at local level.

[70] ONS, BRES

Merthyr Tydfil

Considering the historic trend

In the 20 years leading up to the pandemic, CCR saw a steady increase in the number of jobs. The historic data indicates much stronger growth in Merthyr during the early 2000s, although since Merthyr is a small borough, the jobs data tends to be quite volatile, with annual fluctuations that are small in absolute terms having an apparently large impact on rates of change over time. The trajectory over time saw a sharp rise in the early 2000s, falling after the financial crash, then picking up more slowly thereafter.

Table 18: Change in jobs, 1999-2019

	Merthyr Tydfil		CCR	
	JPA	CAGR, %	JPA	CAGR, %
Change 1999-2009	412	1.9	4,226	0.6
Change 2009-2019	46	0.2	4,288	0.6
Change 1999-2019	229	1.0	4,257	0.6
Total jobs est. 2022	25,649		739,285	

Source: CE/ Experian/ Oxford Economics; SQW analysis. CAGR = compound annual growth rate. JPA = jobs per annum

Table 2 looks more closely at pre-pandemic sectoral dynamics within the jobs market. The early 2000s saw significant losses in manufacturing employment, with the sector shrinking from about 4,200 jobs in 1999 to 3,400 in 2009. Consequently, the manufacturing share of total employment fell from 20% to 14% over the decade. Since then, employment in the sector has stabilised somewhat, albeit with a continued slow contraction.

In the early 2000s, these losses were offset by strong growth in retail and wholesale activity and by a very strong expansion of public service employment, possibly partly associated with the relocation of some Welsh Government activities from Cardiff to Rhydycar Business Park, although public services contracted somewhat in the second decade:

Table 19: Change in jobs by sector, 1999-2019, jobs per annum

	1999-2009	2009-2019	1999-2019
Manufacturing	-79	-18	-49
Construction	-44	29	-7
Transport & distribution	42	0	21
Wholesale & retail	121	-1	60

	1999-2009	2009-2019	1999-2019
Information & communications	89	15	52
Financial, business & prof services	42	38	40
Public services	256	-86	85
Other	-15	65	25
Total	412	46	229

Source: CE/ Experian/ Oxford Economics; SQW analysis. Columns do not sum due to rounding in the sectoral estimates

Identifying a baseline level of growth

Looking to the future, three forecasts were purchased, from Cambridge Econometrics, Experian and Oxford Economics, in November/ December 2023. In the short term (through to 2025), there is considerable divergence between the forecasts, reflecting uncertainty in the light of the long aftermath of the Covid-19 pandemic (which was still relevant in 2022, the last year of 'real' data in the forecast model) and the subsequent energy crisis and conflict in Ukraine.

In the longer term, between 2025 and 2040, there is greater consensus at regional level at the number of jobs per annum that may be achieved. The range for Merthyr Tydfil is between 38 and 76 jobs per annum, with an average of 61 (somewhat higher than the actual rate of jobs growth in the 2009-19 period).

Table 20: Baseline forecasts (jobs per annum, 2025-40)

	Merthyr Tydfil	CCR
Cambridge Econometrics	76	3,023
Experian	67	2,520
Oxford Economics	38	1,773
Average	61	2,439

Source : CE/ Experian/ Oxford Economics ; SQW analysis

Previous discussion with SEWPG identified the average as representing a reasonable baseline at regional level.

Breaking the baseline forecasts down by broad sectoral group, there is a further decline in manufacturing employment (consistent with the baseline picture for CCR as a whole), offset by continued growth in service activities, with the wholesale and retail sector remaining static. Despite a decline in employment in recent years, the baseline forecasts anticipate an increase in public service activities, consistent with the longer-term trend:

Table 21: Sectoral breakdown of baseline forecast (based on average of forecasts)

	Merthyr, total jobs, 2022	Merthyr, JPA, 2025-40	CCR, JPA, 2025-40
Manufacturing	2,294	-28	-675
Construction	1,297	1	158
Transport & distribution	697	1	99
Wholesale & retail	3,876	15	164
Information & communications	1,281	8	133
Financial, business & professional services	3,234	26	1,022
Public services	9,172	23	914
Other	3,001	14	624
Total	25,482	61	2,439

Source: CE/ Experian/ Oxford Economics; SQW analysis

It should be noted that there is some variance between the three baseline forecasts in the sectoral composition of growth. For example, Oxford Economics anticipates a much sharper contraction in manufacturing employment offset by stronger growth in public services, while Experian and Cambridge Econometrics forecast higher growth in retail and wholesale and business and professional services.

There are no alternative baseline forecasts that have been recently purchased for Merthyr. The most recent were a set of forecasts prepared by Cambridge Econometrics in 2017 to inform the *Employment Land Review.* These anticipated jobs growth of 2,137 between 2016 and 2031 (i.e., 142 jobs per annum). This is substantially higher than any of the more recent forecasts, although it should be noted that the general economic outlook was more optimistic at this time. The broad sectoral picture showed a sustained loss of employment in manufacturing, offset by service (especially public service) growth. These variances highlight the extent to which future projections vary between forecasting houses and according to the year of commission and the importance of triangulating them with other sources of data.

Prospects for future growth

Replacement Local Development Plan employment growth target

The Council's current jobs target within the Local Development Plan is stated as 1,877 jobs between 2016 and 2031 (i.e., 125 jobs per annum). This is lower than the 'labour demand'

model used in the Cambridge Econometrics forecasts outlined above, and is based on an assumed increase in the borough's population, reflecting historic housing completions.

The Council's Annual Monitoring Reports indicate that there has been limited progress in bringing forward allocated employment sites to meet this target (although the 2023 AMR notes that major employment sites are unlikely to be delivered at a steady pace)[71].

Major planned and potential investment

Four major sites are allocated in the RLDP, with development still to come forward:

Table 22: Major employment sites

Site	Description
Hoover Strategic Regeneration Area, Pentrebach	Major mixed-used development on the former Hoover factory site, linked with improved Metro station at Pentrebach. Includes 1.5 hectares of employment land on the former Hoover factory car park, in close proximity to the existing Triangle Business Park.
Goat Mill Road	14.75 ha (net) site in Dowlais, currently including proposals for a major plastics recycling facility.
Land south of Merthyr Tydfil Industrial Estate	11.3 ha (net) site at Pentrebach, providing an extension to the existing industrial park.
Ffos-y-Fran	Major 18.85 ha former opencast coal mine east of the A4060. Mining operations ceased in November 2023; the 2018 ELR noted scope for employment uses on the site (and some early occupier interest) although noted that it will take some time to come forward following the end of coal extraction.

Source: Employment Land Review; RLDP

Other potential sources of employment growth

In consultation, Council officers noted that most enquiries are for industrial space. Generally, this is for smaller units than was commonly the case in the past, principally in the 3,000 – 10,000 sq ft range. While there are some enquiries relating to larger units, most demand (and employment growth) is considered to be from small, locally based firms looking to expand. This reflects similar perspectives elsewhere the Valleys, of generally strong indigenous demand for grow-on space, not always satisfied by the market. However, there has been commercial

[71] Merthyr Tydfil CBC (October 2023), *Replacement Local Development Plan: Third Annual Monitoring Report*. Note that the 1,877 jobs are used as a monitoring target, with the implication that these are all B-class jobs. However, much job creation will be in non-B-class jobs, and not all will be created on new sites and premises. The direct linking of the target to delivery of B-class jobs on completed sites therefore suggests that anticipated jobs growth in the borough overall is substantially higher than 125 per annum.

interest in bringing forward new premises to meet this demand, for example in the successful delivery of new units at Pant Industrial Estate at Dowlais.

Access to the A470 and A465 is seen as a key driver in the take-up of industrial space, which the current improvements to the Heads of the Valleys road could help to accelerate.

Beyond 'industrial-type' activities, it was noted that there is little demand for conventional office uses in Merthyr, although higher-quality serviced accommodation, such as the Orbit business centre at Rhydycar, had higher occupancy rates. Potential for future employment growth was also noted in relation to:

- Creative and digital activity. Historically, Merthyr has not had much of a presence in this area, although it was noted that a creative base is starting to develop 'organically', with a couple of gaming companies locating in the town and developer interest in bringing forward creative workspace. While this is likely to be quite small in employment terms, it could develop over time and add to the diversity of the employment base.
- Hospitality, tourism and the 'evening economy'. Merthyr is a sub-regional centre for the northern Valleys, with a concentration of leisure, learning and other facilities in the town centre (e.g.., Merthyr Tydfil College and the Red House arts centre), and the Council has a strategic objective to develop non-retail opportunities in the town centre[72].

A further significant source of future employment growth is in the health economy. Merthyr already has a high share of employment in health and social care[73], with strong growth forecast. The borough includes some sub-regional as well as local health facilities (e.g., Prince Charles Hospital), and there has been recent investment in the integrated Keir Hardie University Health Park

Public sector regeneration investments

There is currently a significant programme of investment in Cardiff Capital Region, including the delivery of the South Wales Metro network, the CCR City Deal's Wider Investment Fund, investment associated with the UK Shared Prosperity Fund, other strategic schemes such as the Investment Zone around Newport, and local investment such as the Long-Term Plan for Towns funding for Merthyr town centre. While this is not necessarily 'additional' to the baseline (since there has been public investment in economic development in the region for many years, and it might reasonably be expected that this would continue in any scenario), the ambitions set out in regional strategy and the 25,000 'jobs target' associated with the City Deal suggest that there is a pathway to above-baseline growth. Of particular relevance to Merthyr Tydfil, this includes the recently approved Northern Valleys Initiative, which seeks to address the viability

[72] See for example, Arts Council for Wales [Straeon Research], *Developing a Cultural Network for Merthyr Tydfil*
[73] With a location quotient of 1.7, meaning that employment in the sector is 1.7 times the sector share of employment in Great Britain overall.

constraints in bringing forward key sites[74]; and investment in the Metro, which will improve rail frequency and reliability between Merthyr, Pontypridd and Cardiff.

Addition of the employment potential of regional investments supported by CCR and other public sources suggests scope for around 1,600 jobs per annum over the baseline across the region. While this should be seen as highly indicative, a rough apportionment by local authority accounting for the location and sectoral profile of specific investments suggests *potential* for around 58 jobs per annum in Merthyr (119 if they were to be additional to the baseline set out above). This should be seen as notional, however[75].

Identifying a reasonable level of growth

This overview demonstrates a reasonably positive picture of employment growth in Merthyr:

- **Baseline** forecasts suggest growth of around **61 jobs per annum** (within a range of between **38 and 76**).
- In the **ten years before the pandemic**, an average **46 jobs per annum** were created. Over a 20-year period, this rises to 229, although this is largely due to a sharp rise in public service employment in the early 2000s.
- The Council's current **jobs target** within the emerging RLDP is **125 jobs per annum**, derived from an assumed increase in population.

There are some investments taking place in Merthyr which could, over time, lead to greater employment demand. The effects of some of these are not yet known: for example, the Heads of the Valleys road improvements are not yet complete, the impact of Metro investment have not yet come to fruition, and the borough's large strategic employment opportunity site at Ffos-y-Fran has yet to be delivered. This is also true of the emerging City Deal investments.

Triangulating these different sources of intelligence suggest that it would be reasonable to anticipate modest growth above the baseline. Around **120 jobs per annum** is broadly in line with the RLDP jobs target and represents an increase on both the baseline and the recent historic trend. It also aligns with the indicative calculation based on the potential effects of 'known' regional investment.

It should be noted that while around 120 jobs per annum is reasonable and there is a 'pathway' to achieving it, **it is not an 'upper limit'**: there may for example be wider policy objectives that the local authority wishes to take into account (such as the need for greater local employment to support higher levels of economic activity). It is also not based on the full range of site-by-site evidence and consultation that would be considered in a detailed study at local level.

[74] CCR (March 2022), *Seeding a Northern Valleys Initiative*

[75] A further scenario was also developed that adjusted for reduced job losses (relative to the baseline in manufacturing, and higher growth to reflect the recent historic trend in business and professional services. This yielded 121 jobs per annum in Merthyr.

Monmouthshire

Considering the historic trend

In the 20 years leading up to the pandemic, CCR saw a steady increase in the number of jobs. Monmouthshire has also seen relatively strong growth, at double the regional rate in the decade leading up to the financial crisis, and at the same rate as the rest of CCR in the decade that followed:

Table 23: Change in jobs, 1999-2019

	Monmouthshire		CCR	
	JPA	CAGR, %	JPA	CAGR, %
Change 1999-2009	454	1.2	4,226	0.6
Change 2009-2019	269	0.6	4,288	0.6
Change 1999-2019	362	0.9	4,257	0.6
Total jobs est. 2022	43,840		739,285	

Source: CE/ Experian/ Oxford Economics; SQW analysis. CAGR = compound annual growth rate; JPA = jobs per annum

Table 2 looks more closely at pre-pandemic sectoral dynamics within the jobs market. The early 2000s saw losses in manufacturing employment, with the sector shrinking from about 5,100 jobs in 1999 to 3,500 in 2009. This was with the picture across South Wales, although the relatively small manufacturing share of employment in Monmouthshire meant that the county was less vulnerable to transition than its neighbours. Since then, employment in the sector has stabilised, with a modest increase in employment. These losses in manufacturing have been offset by growth service sector employment, despite some contraction in public sector and retail and wholesale activity more recently.

Table 24: Change in jobs by sector, 1999-2019, jobs per annum

	1999-2009	2009-2019	1999-2019
Manufacturing	-164	28	-68
Construction	127	58	92
Transport & distribution	-49	59	5
Wholesale & retail	157	-112	22
Information & communications	35	15	25
Financial, business & prof services	99	59	79

	1999-2009	2009-2019	1999-2019
Public services	267	-35	116
Other	-17	193	88
Total	454	269	362

Source: CE/ Experian/ Oxford Economics; SQW analysis. Columns do not exactly sum due to rounding in the sectoral estimates

Identifying a baseline level of growth

Looking to the future, three forecasts were purchased, from Cambridge Econometrics, Experian and Oxford Economics, in November/ December 2023. In the short term (through to 2025), there is considerable divergence between the forecasts, reflecting uncertainty in the light of the long aftermath of the Covid-19 pandemic (which was still relevant in 2022, the last year of 'real' data in the forecast model) and the subsequent energy crisis and conflict in Ukraine.

In the longer term, between 2025 and 2040, there is greater consensus at regional level at the number of jobs per annum that may be achieved. The range for Monmouthshire is between 67 and 198 jobs per annum, with an average of 130 (roughly half the rate of jobs growth in the 2009-19 period).

Table 25: Baseline forecasts (jobs per annum, 2025-40)

	Monmouthshire	CCR
Cambridge Econometrics	198	3,023
Experian	67	2,520
Oxford Economics	126	1,773
Average	130	2,439

Source : CE/ Experian/ Oxford Economics ; SQW analysis

Previous discussion with SEWPG identified the average as representing a reasonable baseline at regional level.

Breaking the baseline forecasts down by broad sectoral group, there is a further decline in manufacturing employment (consistent with the baseline picture for CCR as a whole), offset by continued growth in service activities (including hospitality, accounted for under 'Other' in Table 4 below). Despite a decline in employment in recent years, the baseline forecasts anticipate an increase in public service activities, consistent with the longer-term trend (as well as modest growth in retail and wholesale).

Table 26: Sectoral breakdown of baseline forecast (based on average of forecasts)

	Monmouthshire, total jobs, 2022	Monmouthshire, JPA, 2025-40	CCR, JPA, 2025-40
Manufacturing	3,701	-33	-675
Construction	3,772	12	158
Transport & distribution	1,804	7	99
Wholesale & retail	6,674	10	164
Information & communications	1,340	4	133
Financial, business & professional services	7,085	44	1,022
Public services	11,738	40	914
Other	7,725	47	624
Total	43,840	130	2,439

Source: CE/ Experian/ Oxford Economics; SQW analysis

It should be noted that there is some variance between the three baseline forecasts in the sectoral composition of growth. For example, Oxford Economics anticipates a much sharper contraction in manufacturing employment, while Cambridge Econometrics anticipates more rapid growth in financial, professional and business services and hospitality.

These baseline forecasts can be compared with three further labour demand forecasting exercises commissioned in recent years:

- Monmouthshire's *Employment Land Review*, completed in 2022, used forecasts from Oxford Economics, which anticipated 406 net additional jobs between 2018 and 2033 (i.e., 27 jobs per annum)[76]. Losses were forecast in manufacturing, construction, agriculture and real estate (and to a lesser extent, utilities, finance and insurance, education and health), with the strongest growth in accommodation and food service; arts, entertainment and recreation; administrative and support service activities; public administration and defence; and wholesale and retail.
- A previous iteration of the ELR was completed in 2021. This also used Oxford Economics forecasts, which anticipated 497 additional jobs (33 jobs per annum), with the same broad sectoral balance.

[76] BE Group (November 2022), *Monmouthshire Employment Land Review Update*, p.103

- An earlier set of forecasts was also commissioned from Oxford Economics to inform the *Larger than Local Regional Employment Study*, prepared on behalf of Monmouthshire and neighbouring Gwent authorities in 2019/20[77]. This anticipated a net loss of 374 jobs in Monmouthshire between 2018 and 2040 (i.e., -17 jobs per annum), with the loss mostly driven by manufacturing (although with growth in ten of the 19 sectors within the forecast, especially professional, scientific and technical services, arts, entertainment and recreation, construction, and admin and support services.

There is quite substantial variance between these forecasts, demonstrating the extent to which future projections vary between forecasting houses and according to the year of commission, and highlighting the need to consider them in conjunction with other forms of evidence.

Prospects for future growth

Strategic ambition

Jobs target

Monmouthshire County Council has identified a jobs target of 6,240 (i.e., 416 jobs per annum) over the 2018-33 RLDP period, substantially higher than the baseline. This is set out as Policy S1 in the RLDP *Preferred Strategy*[78].

This jobs target is based on a growth strategy which seeks to reduce levels of out-commuting and to 'rebalance' the county's demographic profile in the context of a trend towards a shrinking working age population[79]. The jobs target aligns with one of several demographically-driven scenarios presented within a demographic evidence paper, which includes an adjustment to allow for higher in-migration from Bristol and South Gloucestershire (based on experience over the preceding five years) and a reduction in out-commuting based both on an ambition to attract new employment and to encourage people to work closer to home[80].

The 2022 *Employment Land Review* considers the jobs target as a 'policy on' scenario, *"driven through policy interventions to support housing and employment growth in order to achieve an outcome above the forecast based on a continuation of trends"*[81]. The ELR breaks this down sectorally, using the Oxford Economics baseline and official data, with some adjustments based on local market intelligence (including a more positive picture for manufacturing and construction)[82].

[77] BE Group (March 2020), *Larger than Local Regional Employment Study*
[78] Monmouthshire County Council (December 2022), *Monmouthshire Replacement Local Development Plan: Preferred Strategy*
[79] *Preferred Strategy*, p.30
[80] Edge Analytics (November 2021), *Monmouthshire: Updating the RLDP Evidence*
[81] BE Group (November 2022), *Monmouthshire Employment Land Review Update*, p.vi
[82] Note that the ELR refers to a 'policy on' scenario of 6,420 jobs (428 per annum), rather than 6,240

Economic strategy

The 6,240 jobs target is translated into a 'key objective' of Monmouthshire's recently adopted *Economy, Employment and Skills Strategy*[83]. The Strategy describes Monmouthshire as offering a "*high value, highly skilled, diverse, and resilient economy, working to its full capacity, attracting investment to support its strong entrepreneurial culture"*. This is further supported by wider evidence of Monmouthshire's relatively strong economic performance, with the county assessed as the second most competitive locality in Wales (after Cardiff) in the 2023 Competitiveness Index[84].

In outlining the county's opportunities and challenges, the *Economy, Employment and Skills Strategy* notes that:

- **Resident wages are high**, relative to the rest of the CCR and neighbours in England. Workplace earnings are also higher than the regional average, although the differential is less pronounced, with the implication that there is out-commuting to higher-paid jobs, especially to Cardiff, Bristol and South Gloucestershire.
- Reflecting high average wages, the **occupational profile is oriented towards professional, managerial and technical occupations.** Workforce qualifications are also higher than in CCR and neighbours in England.
- However, **the population is ageing**, raising concerns for future sustainability. The Strategy notes the role that the housing market plays in this, given low affordability, and the need for *"additional, high-value jobs to attract younger people and to rebalance the age profile of Monmouthshire".*

This analysis supports the county's overall growth strategy. Within this context, the Strategy sets out four priorities for sustainable economic growth:

- **'A vibrant, greener Monmouthshire'**, including a focus on supporting the vitality of the county's town centres, supporting rural diversification and the transition to net zero and improving the visitor experience to deliver sustainable growth in the hospitality sector.
- **'A fairer, more successful Monmouthshire'**, by encouraging more job opportunities as highlighted above and actions to improve skills and employment progression.
- **'A thriving, ambitious Monmouthshire'**, including support for increasing entrepreneurship, enabling businesses to expand and taking advantage of those sectors in which Monmouthshire and CCR have relative strengths.
- **'A well-connected Monmouthshire, attracting business investment**', through improved digital and transport connectivity and the availability of employment land and premises.

[83] Monmouthshire County Council (2022), *Economy, Employment and Skills Strategy*, p.38
[84] Cardiff University/ Nottingham Business School (2023), *UK Competitiveness Index*

Opportunities for employment growth

Monmouthshire has been successful in recent years in securing steady, incremental growth within a diverse, SME-oriented economy, with strengths in hospitality and the visitor economy and in professional and business services. The latter offers opportunities for a sustained increase in home-working, linked with relatively easy access to larger centres nearby.

South Monmouthshire and the M4 Corridor

Most of the major locations for growth are in the south of the county, linked by proximity to the M4 and to areas of housing growth around Chepstow, Caldicot and the Severnside communities and supported by ambitions for a new Skills Centre in the area. The area also benefits from its location east of the Bryn Glas tunnels, which is seen as attractive, especially for logistics operators. Key sites include:

- A concentration of major sites around **Magor**, including:
  - **Gwent Europark:** This was identified in the Gwent *Larger than Local* study as a regionally significant strategic site for industrial and logistics use. The site straddles the Newport-Monmouthshire border, with the Newport portion substantially built out. The site is allocated in the adopted LDP, and the northern part of the current allocation has planning permission for B1, B2 and B8 development. However, flood risk and ecology issues will need to be overcome for development to come forward.
  - **Quay Point:** 19.6 ha candidate site just west of Magor and to the northeast of Gwent Europark (with 13.76 ha of undeveloped land). Part of the site has been taken up by an expansion of InBev's existing brewery, but there is potentially 10.6ha for development in a prominent M4 location.
  - **Wales One (West):** 4 ha site opposite the InBev brewery and adjacent to the existing Wales One East business park. An initial warehousing development is currently nearing completion, creating around 300 jobs.
- Bradbury Farm at Crick (part of the **Caldicot East** proposed strategic site allocation in the emerging RLDP), with scope for employment uses as part of a mixed-use development
- Land around Junction 2 of the M48 at **Chepstow**, adjacent to the existing Newhouse Farm Industrial Estate, with scope for logistics and non-B-class uses.

The rest of Monmouthshire

Elsewhere in the county, scope for major investment is more constrained by environmental and connectivity factors. The major opportunities include employment development proposed in the emerging RLDP, including part of the proposed strategic site at **Abergavenny East** (the scale of which has yet to be determined), and potential development opportunities at **Monmouth** and **Raglan**, including smaller units that could support demand in the north of the county.

Public sector regeneration investments

There is currently a significant programme of investment in Cardiff Capital Region, including the delivery of the South Wales Metro network, the CCR City Deal's Wider Investment Fund, investment associated with the UK Shared Prosperity Fund and other strategic schemes such as the Investment Zone around Newport. While this is not necessarily 'additional' to the baseline (since there has been public investment in economic development in the region for many years, and it might reasonably be expected that this would continue in any scenario), the ambitions set out in regional strategy and the 25,000 'jobs target' associated with the City Deal suggest that there is a pathway to above-baseline growth.

Addition of the employment potential of regional investments supported by CCR and other public sources suggests scope for around 1,600 jobs per annum over the baseline across the region. While this should be seen as highly indicative, a rough apportionment by local authority accounting for the location and sectoral profile of specific investments suggests *potential* for around 48 jobs per annum in Monmouthshire (178 in total if they were to be additional to the baseline set out above). This should be seen as notional, however. Developments at Newport are likely to be especially relevant to Monmouthshire, given the proximity of the Investment Zone (although anticipated jobs are not yet known) and growth associated with the expansion of the compound semiconductor sector.

Wider perspectives on demand

Council officers highlighted high demand for industrial space relative to available supply. This was also recognised in the ELR, which observed very little availability of units larger than 500 sq m. Despite the attractiveness of the M4 Corridor for industrial development, stakeholders consulted as part of the ELR highlighted viability constraints in bringing forward new development. Office demand was seen as much weaker than industrial, given the recent shift in working practices and the absence of an established office location in the county, although it was noted that 'work hub' type facilities may be attractive in the market towns.

Identifying a reasonable level of growth

This overview illustrates a somewhat different pattern of economic development in Monmouthshire compared with the rest of the region, reflecting the county's largely rural nature and the extent to which it benefits from links into Gloucestershire, Herefordshire and Bristol, as well as to other parts of CCR. Generally, the economy is well-performing and has sustained positive jobs growth in recent years, with evidence that future growth is potentially constrained by labour supply.

- **Baseline** forecasts suggest growth of around **130 jobs per annum** (within a range of between **67 and 198**). These are more positive than the earlier baseline projections purchased to inform the 2021 and 2022 iterations of the Employment Land Review, which anticipated 27 and 32 jobs per annum respectively.

- In the **ten years before the pandemic**, an average **269 jobs per annum** were created. Over a 20-year period, this rises to 362.
- The Council's current **jobs target** within the emerging RLDP is **416 jobs per annum**, which is cast as a 'policy on' scenario, based on a demographic projection which assumes greater in-migration and reduced outward commuting.

There is a substantial variance between the jobs target and the baseline (although it is worth noting the difference between the most recent and the earlier baseline forecasts, even when comparing Oxford Economics' projections).

For a 'reasonable assumption' within a policy-neutral context, we assume the ten-year historic trajectory of around **270 jobs per annum**. However, steady growth with Monmouthshire's small business base could augment this – as of course could achievement of positive in-migration within the county's growth strategy. **This should therefore not be regarded as an 'upper limit'**: there may for example be wider policy objectives that the local authority wishes to take into account (such as the need for greater local employment to support higher levels of economic activity). It is also not based on the full range of site-by-site evidence and consultation that would be considered in a detailed study at local level.

Newport

Considering the historic trend

In the 20 years leading up to the pandemic, CCR saw a steady increase in the number of jobs. The picture in Newport has been less steady: following growth at the start of the millennium, there was a prolonged contraction in the number of jobs between 2006 and 2013. Subsequently, performance has been much stronger, with a sharp return to growth. The 20-year historic trend therefore masks two distinct trajectories, as Table 1 demonstrates:

Table 27: Change in jobs, 1999-2019

	Newport		CCR	
	JPA	CAGR, %	JPA	CAGR, %
Change 1999-2009	-196	-0.2	4,226	0.6
Change 2009-2019	816	1.0	4,288	0.6
Change 1999-2019	310	0.4	4,257	0.6
Total jobs est. 2022	87,024		739,285	

Source: CE/ Experian/ Oxford Economics; SQW analysis. CAGR = compound annual growth rate. JPA = jobs per annum

Table 2 looks more closely at pre-pandemic sectoral dynamics within the jobs market. The early 2000s saw significant losses in manufacturing employment, with the sector shrinking from about 17,000 jobs in 1999 to 9,000 in 2009, including the loss of around 1,300 jobs with the end of steelmaking at Llanwern in 2001. Consequently, the manufacturing share of total employment fell from 21% to 12% over the decade. Since then, employment in the sector has stabilised somewhat, albeit with a continued contraction to around 8,000 jobs by 2019.

These losses in manufacturing have been offset by growth in areas such as transport and logistics, finance and professional and business services. The 2000s also saw strong growth in public services (including about 1,000 staff as a result of the relocation to Newport of the Office for National Statistics in 2005) [85].

Table 28: Change in jobs by sector, 1999-2019, jobs per annum

	1999-2009	2009-2019	1999-2019
Manufacturing	-787	-125	-456
Construction	-78	-17	-47
Transport & distribution	17	243	130

[85] Although the table indicates a sharp fall in financial, professional and business services in 1999-2009, this is partly due to a fall in job numbers in 2008/09, which were subsequently partly recovered in the following year.

	1999-2009	2009-2019	1999-2019
Wholesale & retail	142	29	85
Information & communications	33	-99	-33
Financial, business & prof services	-239	501	131
Public services	686	1	344
Other	31	280	155
Total	-196	816	310

Source: CE/ Experian/ Oxford Economics; SQW analysis. Columns do not sum due to rounding in the sectoral estimates

Identifying a baseline level of growth

Looking to the future, three forecasts were purchased, from Cambridge Econometrics, Experian and Oxford Economics, in November/ December 2023. In the short term (through to 2025), there is considerable divergence between the forecasts, reflecting uncertainty in the light of the long aftermath of the Covid-19 pandemic (which was still relevant in 2022, the last year of 'real' data in the forecast model) and the subsequent energy crisis and conflict in Ukraine.

In the longer term, between 2025 and 2040, there is greater consensus at regional level at the number of jobs per annum that may be achieved. The range for Newport is between 157 and 460 jobs per annum, with an average of 331, broadly in line with the 20-year historic trend.

Table 29: Baseline forecasts (jobs per annum, 2025-40)

	Newport	CCR
Cambridge Econometrics	375	3,023
Experian	460	2,520
Oxford Economics	157	1,773
Average	331	2,439

Source : CE/ Experian/ Oxford Economics ; SQW analysis

Previous discussion with SEWPG identified the average as representing a reasonable baseline at regional level.

Breaking the baseline forecasts down by broad sectoral group, there is a further decline in manufacturing employment (consistent with the baseline picture for CCR as a whole), offset by continued growth in service activities. Despite a decline in employment in recent years, the baseline forecasts anticipate an increase in public service activities, consistent with the longer-term trend:

Table 30: Sectoral breakdown of baseline forecast (based on average of forecasts)

	Newport, total jobs, 2022	Newport, JPA, 2025-40	CCR, JPA, 2025-40
Manufacturing	8,030	-61	-675
Construction	3,375	2	158
Transport & distribution	4,673	29	99
Wholesale & retail	11,433	16	164
Information & communications	2,444	5	133
Financial, business & professional services	21,782	122	1,022
Public services	23,862	148	914
Other	11,425	70	624
Total	87,024	331	2,439

Source: CE/ Experian/ Oxford Economics; SQW analysis

It should be noted that there is some variance between the three baseline forecasts in the sectoral composition of growth. For example, Oxford Economics anticipates sharp contraction in manufacturing employment (a loss of 151 jobs per annum)[86], while Experian anticipates modest growth in the sector (13 jobs per annum). Experian's expectations of growth in transport and distribution and public services are also higher, driving higher growth expectations overall.

These baseline forecasts can be compared with two other sets of projections prepared in recent years:

- For the Newport *Employment Land Review,* completed in 2022, a set of forecasts were obtained from Oxford Economics[87]. These anticipated a loss of 1,241 jobs between 2021 and 2036 (i.e., -83 jobs per annum). This was principally driven by losses in manufacturing and public administration, partially offset by gains in health, administrative and support services, professional and scientific services and hospitality.
- For the *Larger than Local Regional Employment Study*, completed in 2020 and covering the five Gwent authorities, Oxford Economics anticipated growth in Newport of 3,384 in 2018-

[86] The baseline forecasts are insufficiently granular to identify sub-sectoral trends. Within the manufacturing sector, it is noted that there is evidence of growth in some 'higher-value' sub-sectors (see below); overall, employment contraction over time has partly been due to the partial exit of some traditional sectors (e.g., steel) and partly through productivity gain – note that regional manufacturing output has risen over time in real terms, even as employment has fallen substantially.
[87] BE Group (February 2022), *Newport City Council Employment Land Review*

40 (i.e., 154 jobs per annum)[88]. These forecasts were prepared pre-pandemic and are now somewhat dated (and reflective of a generally more optimistic global outlook). However, the broad sectoral distribution was consistent, with large losses in manufacturing and large gains in health and business administration and support.

These variances in overall job numbers highlight the extent to which future projections vary between forecasting houses and according to the year of commission and illustrates the importance of considering them alongside other sources of intelligence.

Prospects for future growth

Newport has grown rapidly in population terms in recent years. It is within the National Growth Area and benefits from its location between Bristol and Cardiff, with good access to the strategic rail and road network. It also has an extensive stock of major employment sites, including multi-occupancy business parks such as Langstone Business Village and Celtic Springs, and sites occupied by large single employers (e.g., the Office for National Statistics).

The city has become an important centre for technology-related activities. In particular, this includes the **compound semiconductor** sector, which is identified as a strategic regional strength and which is anchored in Newport by companies such as Nexperia (recently acquired by Vishay Intertechnology), IQE and KLA, as well as by the national Compound Semiconductor Applications Catapult. Newport also has a growing presence in **data science** and cybersecurity, including University of South Wales' National Cybersecurity Academy and Airbus' cybersecurity hub. Beyond the tech sector, logistics activity has also expanded in recent years, linked with the city's M4 location.

The following paragraphs set out the overall economic vision and strategy, key locations for employment growth, opportunities associated with City Deal and Investment Zone activity and wider demand perspectives.

Economic strategy and RLDP jobs target

The City Council is currently progressing a new economic strategy. Of relevance to future economic growth, the Replacement Local Development Plan *Preferred Strategy* sets out a vision of *"a strategically significant City which will contribute towards the national growth of Wales"*, and *"an economically thriving City which supports and attracts business and industry at all scales, particularly where they focus on sustainable, innovative and technologically leading practices, which contribute towards cultivating a skilled and adaptable workforce"*[89].

In terms of future employment growth, the Preferred Strategy sets a goal of 8,640 jobs between 2021 and 2036 (i.e., 576 jobs per annum). This is derived from a dwelling-led growth strategy

[88] BE Group (March 2020), *Larger than Local Regional Employment Study.* This covered Blaenau Gwent, Caerphilly, Monmouthshire and Torfaen, as well as Newport.
[89] Newport City Council (October 2023), *Newport Local Development Plan: Preferred Strategy*, p.15

based on delivery rates in the ten years before the pandemic, with the aim of supporting continued growth.

Key locations for employment growth

Newport City Centre

The Preferred Strategy observes that Newport city centre has faced some challenges in recent years, linked with the structural changes in the retail sector that are impacting many centres. However, the *Larger than Local Study* recommended recognition of the primacy of the city centre within the Gwent sub-region, noting that it has the highest concentration of 'higher order' facilities[90]. It also noted that it had the potential to support additional Grade A office accommodation, a point that was also recognised in a report on the commercial property market completed for the Welsh Government at around the same time[91]. The Employment Land Review reported some positive signs for investment in the city centre, especially in the light of increasing demand for smaller-scale, flexible workspace, albeit noting vulnerability to individual occupier decisions[92].

Within the city centre, opportunities for growth are especially focused around the **Northern Gateway,** including the area around the station. This was identified in the 2018 City Centre Masterplan, with opportunities especially highlighted in relation to the tech sector. Recent investment in Newport city centre includes Tramshed Tech's Innovation Station and the associated Welsh Government-funded 'soft landing' programme for international tech investors. To the south of the city centre, the development of **Newport Knowledge Quarter** will see an expansion of University of South Wales' presence, along with new city centre campus for Coleg Gwent and an expanded leisure offer.

Work is currently underway to develop a ***Placemaking Plan*** for the city centre. The proposition is that beyond some of the shorter-term market signals highlighted in the ELR, the city centre ought to be able to capitalise on its rail connectivity, potential Metro links and growing tech sector to accommodate additional, higher-value economic activity, reinforcing (and being reinforced by) the city centre's role as a retail and leisure destination.

Strategic sites

The *Larger than Local Study* identified ten 'strategic employment sites' in the Gwent sub-region, half of which were in Newport. These are set out in the table below:

[90] BE Group (2020), *Larger than Local Study*, p.132
[91] SQW (2020), *Commercial Property: Market analysis and potential interventions*
[92] E.g., Admiral's decision to vacate its city centre offices in the light of post-Covid working practices

Table 31: Strategic employment sites in Newport

Site	Description
Duffryn/ Imperial Park	Imperial Park and the adjacent 38.5 ha Duffryn site are located in the west of Newport, south of the A48. Imperial Park includes the compound semiconductor manufacturer IQE and the Compound Semiconductor Catapult; within this sector, KLA has also developed a new R&D and manufacturing plant on the site, which also accommodates major data centre operations with capacity for expansion.
East of Queensway Meadows	27 ha site with potential for logistics use
Solutia	40 ha site adjacent to Eastman's chemicals manufacturing operation to the south of Newport city centre, with scope to accommodate the company's future expansion.
Celtic Business Park	29.5 ha logistics and industrial park on the former Llanwern steelworks site, currently being developed by St Modwen
Gwent Europort	16 ha site adjacent to existing employment area and extending into Monmouthshire, with scope for larger scale logistics and other industrial activity.

Source: Gwent Larger than Local Study; Newport ELR

In addition, ABP Ports recently published a new 'masterplan' for the **Port of Newport**, part of a series of development strategies for all its South Wales port holdings[93]. Currently, the port operates as a steel, metals and recycling hu; the masterplan envisages its development as a "decarbonised industrial logistics port" and a "clean growth hub". This includes scope for hydrogen production and renewable energy generation at the Port, as well as scope for new production facilities and the opportunity to accommodate larger vessels.

City Deal, Investment Zone and other public investment

There is currently a significant programme of investment in Cardiff Capital Region. This includes the delivery of the South Wales Metro network, the CCR City Deal's Wider Investment Fund and investment associated with the UK Shared Prosperity Fund. While this is not necessarily 'additional' to the baseline (since there has been public investment in economic development in the region for many years, and it might reasonably be expected that this would continue in any scenario), the ambitions set out in regional strategy and the 25,000 'jobs target' associated with the City Deal suggest that there is a pathway to above-baseline growth.

In Newport, significant existing and planned investments include:

- Continued investment in the **compound semiconductor sector** and allied activities. The £38 million investment in the development of IQE's new factory at Imperial Park was the first major intervention through the CCR Wider Investment Fund. This has subsequently been

[93] ABP (February 2024), *Future Ports: Newport*

complemented by a range of other initiatives to develop the sector, including from UK Research and Innovation, with the aim of building a 'cluster'. Recent analysis of employment growth in the compound semiconductor sector estimated 2% net employment growth in Wales between 2021 and 2023: with the major companies (Nexperia, IQE, KLA) all based in Newport[94].

- The new **Investment Zone**, announced in November 2023. This is a £160 million package of site-based tax incentives and infrastructure investment designed to attract higher value employment and innovation. The 'Cardiff-Newport Investment Zone' contains an industrial proposition oriented to the compound semiconductor sector, reflecting Newport's concentration of industrial and R&D activity and Cardiff's research base, with scope to regenerate the existing UK Government property assets at the Office for National Statistics and Intellectual Property Office. Work is currently underway to develop the Investment Zone vision.

Addition of the employment potential of regional investments supported by CCR and other public sources suggests scope for around 1,600 jobs per annum over the baseline across the region. While this should be seen as highly indicative, a rough apportionment by local authority accounting for the location and sectoral profile of specific investments suggests *potential* for around 262 jobs per annum in Newport (593 if they were to be additional to the baseline set out above). This should be seen as notional, however, not least since the detail of the Investment Zone has yet to be determined.

Separately, the ELR included a 'policy on' labour demand forecast which was linked with the delivery of the CCR job target. This was derived from the 2021 vintage Oxford Economics baseline projections, with adjustments made on a sector-by-sector basis for those projects which were likely to be supported through the City Deal. This yielded 7,397 additional jobs between 2021 and 2036 (i.e., 493 jobs per annum). While this is lower than the dwelling-based jobs target contained in the Preferred Strategy, it is substantially greater than the baseline.

Wider perspectives on demand

In consultation, local authority officers considered that the outlook for Newport's economy was strong, reflecting a consolidation of opportunities in the tech sectors highlighted above and the likely positive effects on Newport of growth in Cardiff and Bristol. The most recent Annual Monitoring Report highlighted good progress in bringing forward employment land ahead of target, with total employment growth also ahead of the LDP target. Business consultation as part of the ELR observed some tightness in the labour market, with respondents noting workforce recruitment challenges.

In terms of market sentiment, the ELR noted:

[94] CSConnected/ Cardiff University (February 2024), *Annual Report: Compound Semiconductor Cluster in South Wales*

- Prospects for growth in **logistics**, with the market anticipated to respond to greater certainty following the cancellation of the M4 Relief Road, and with demand likely to focus east of Bryn Glas. However, the ELR noted weaker prospects for Newport than for Avonmouth/ M5 in attracting larger-scale operations.
- Strong **industrial** demand, including for data centres, and with "*positive level of more local demand with keen interest in smaller units 2,000 – 5,000 sqft*", mirroring the picture across South Wales.
- A buoyant out-of-town **office** market, and "positive signs", in the city centre, notwithstanding the city centre's secondary position relative to Cardiff and Bristol.

Identifying a reasonable level of growth

This overview demonstrates a generally strong economy in Newport, with positive prospects for growth. In summary:

- **Baseline** forecasts suggest growth of around **331 jobs per annum** (within a range of between **157 and 460**). These compare with a baseline forecast of **215** jobs per annum prepared to inform the Employment Land Review.
- In the **ten years before the pandemic**, an average **816 jobs per annum** were created. Over a 20-year period, this falls to **310**, with later gains offsetting a contraction in total employment in the early 2000s.
- The Council's current **jobs target** within the emerging RLDP is **576 jobs per annum**, which is based on a dwelling-based scenario. In addition, a **'policy-on' scenario** was developed as part of the ELR, based on the city's potential share of CCR City Deal interventions, which yielded **493 jobs per annum.** A similar approach undertaken as part of this exercise suggested potential for **593** jobs per annum.

There are also significant investments taking place in Newport which could, over time, lead to greater employment demand. Some of these are regionally significant, and it is worth noting the close alignment of (for example) the Investment Zone, City Deal and UKRI investment in providing a coordinated approach to the development of a regionally important growth industry.

Triangulating these different sources of intelligence suggest that it would be reasonable to anticipate growth above the baseline. Taking an average of the baseline, the ten and twenty-year historic trends and the Council's target and 'City Deal growth' scenario **509 jobs per annum**.

It should be noted that while around 509 jobs per annum is reasonable and there is a 'pathway' to achieving it, it is not an 'upper limit': there may for example be wider policy objectives that the local authority wishes to take into account (such as the need for greater local employment to support higher levels of economic activity). It is also not based on the full range of site-by-site evidence and consultation that would be considered in a detailed study at local level.

Rhondda Cynon Taf

Considering the historic trend

In the 20 years leading up to the pandemic, CCR saw a steady increase in the number of jobs. Rhondda Cynon Taf also saw growth, although at a much slower rate. However, the decade after the financial crisis experienced stronger jobs growth than in the early 2000s, and the estimated stock of jobs also grew in 2019-22, despite the economic downturn caused by Covid-19.

Table 32: Change in jobs, 1999-2019

	Rhondda Cynon Taf		CCR	
	JPA	CAGR, %	JPA	CAGR, %
Change 1999-2009	68	0.1	4,226	0.6
Change 2009-2019	235	0.3	4,288	0.6
Change 1999-2019	151	0.2	4,257	0.6
Total jobs est. 2022	92,952		739,285	

Source: CE/ Experian/ Oxford Economics; SQW analysis. CAGR = compound annual growth rate. JPA = jobs per annum

Table 2 looks more closely at pre-pandemic sectoral dynamics within the jobs market. The early 2000s saw significant losses in manufacturing employment, with the sector shrinking from about 21,000 jobs in 1999 to 12,000 in 2009. Consequently, the manufacturing share of total employment fell from 25% to 14% over the decade. Since then, employment in the sector has stabilised somewhat, albeit with a continued contraction to around 11,000 jobs by 2019. These losses in manufacturing have been offset by growth in areas such as administrative and support services, hospitality-related activities and (over the longer term) public services.

Table 33: Change in jobs by sector, 1999-2019, jobs per annum

	1999-2009	2009-2019	1999-2019
Manufacturing	-897	-120	-509
Construction	-22	64	21
Transport & distribution	187	-85	51
Wholesale & retail	93	47	70
Information & communications	24	38	31
Financial, business & prof services	332	196	264
Public services	394	-133	130

	1999-2009	2009-2019	1999-2019
Other	-43	225	91
Total	68	235	151

Source: CE/ Experian/ Oxford Economics; SQW analysis. Columns do not sum due to rounding in the sectoral estimates

Identifying a baseline level of growth

Looking to the future, three forecasts were purchased, from Cambridge Econometrics, Experian and Oxford Economics, in November/ December 2023. In the short term (through to 2025), there is considerable divergence between the forecasts, reflecting uncertainty in the light of the long aftermath of the Covid-19 pandemic (which was still relevant in 2022, the last year of 'real' data in the forecast model) and the subsequent energy crisis and conflict in Ukraine.

In the longer term, between 2025 and 2040, there is greater consensus at regional level at the number of jobs per annum that may be achieved. The range for Rhondda Cynon Taf is between 104 and 313 jobs per annum, with an average of 223 (slightly below the rate of jobs growth in the 2009-19 period).

Table 34: Baseline forecasts (jobs per annum, 2025-40)

	Rhondda Cynon Taf	CCR
Cambridge Econometrics	313	3,023
Experian	253	2,520
Oxford Economics	104	1,773
Average	223	2,439

Source: CE/ Experian/ Oxford Economics ; SQW analysis

Previous discussion with SEWPG identified the average as representing a reasonable baseline at regional level.

Breaking the baseline forecasts down by broad sectoral group, there is a further decline in manufacturing employment (consistent with the baseline picture for CCR as a whole), offset by continued growth in service activities, with the wholesale and retail sector remaining static. Despite a decline in employment in recent years, the baseline forecasts anticipate an increase in public service activities, consistent with the longer-term trend:

Table 35: Sectoral breakdown of baseline forecast (based on average of forecasts)

	RCT, total jobs, 2022	RCT, JPA, 2025-40	CCR, JPA, 2025-40
Manufacturing	11,373	-95	-675

	RCT, total jobs, 2022	RCT, JPA, 2025-40	CCR, JPA, 2025-40
Construction	7,889	30	158
Transport & distribution	3,526	18	99
Wholesale & retail	14,821	0	164
Information & communications	1,473	6	133
Financial, business & professional services	12,751	69	1,022
Public services	28,751	126	914
Other	12,481	69	624
Total	92,885	223	2,439

Source: CE/ Experian/ Oxford Economics; SQW analysis

It should be noted that there is some variance between the three baseline forecasts in the sectoral composition of growth. For example, Oxford Economics anticipates a much sharper contraction in manufacturing employment, while Experian anticipates more rapid growth in public services and a contraction in retail and wholesale.

These baseline forecasts are substantially more 'optimistic' than the baseline projections used to support RCT's *Employment Land Review,* completed in 2023[95]. This used forecasts commissioned from Oxford Economics, which anticipated total employment growth of 186 between 2022 and 2037 (i.e., 12 jobs per annum). The highest growth (in absolute terms) was anticipated within retail and wholesale, health and social care, business administration and support, professional and scientific services and accommodation and food service; offset by a contraction of some 226 jobs per annum in manufacturing. It is worth noting that these earlier forecasts are more pessimistic even than Oxford Economics' latest vintage, although the earlier forecasts do project growth in the shorter term followed by longer term decline[96]. This highlights the extent to which future projections vary between forecasting houses and according to the year of commission.

[95] BE Group (July 2023), *Rhondda Cynon Taf Employment Land Review*
[96] The Oxford Economics 2022 vintage forecasts anticipate 2,000 more jobs in 2027 relative to 2022, with decline thereafter, partly linked with the demographic assumptions within Oxford Economics' model.

Prospects for future growth

Major planned and potential investment

Major opportunity locations

The Employment Land Review broadly characterises Rhondda Cynon Taf as containing three 'market propositions': the central part of the M4 corridor west from Llantrisant, the Treforest/ Nantgarw area along the A470, and the northern part of the county and the Heads of the Valleys. Within these broad market areas

there are several major known locations for growth (including those which are underway, but which have not yet delivered their full potential in terms of employment growth).

- Larger locations for employment growth in the **south-west** of RCT include:
  - **Pencoed Technology Park,** located at Junction 35 of the M4, adjacent to the borders with Vale of Glamorgan and Bridgend (with Sony just over the border on the Bridgend side). The Park contains around 6.6 ha of developable land for employment use, within a series of serviced plots, alongside an existing facility occupied by the medtech firm Ortho Clinical Diagnostics. The ELR describes it as a "near term prospect", offering opportunities for larger businesses and headquarter sites. It is owned by the Welsh Government, which reports strong interest, including through a 46,000 sq ft speculative development reported as coming forward at the time the ELR was prepared.
  - **Coed Ely,** a 30-hectare former colliery and coking site at Tonyrefail, with access to the M4 (and the wider stock of existing employment activity around Llantrisant) via the A4119. The site has been developed as a joint venture between RCT Council and the Welsh Government: while only one unit had been occupied at the time the ELR was prepared, it was noted that "almost all plots [were] committed or under offer".
  - A proposed c.15 ha employment site at **Llanilid** (a former opencast mining site south of Llanharan, which is also the location of a major housing development). This is in addition to those sites identified within the ELR.
  - The existing **Llantrisant Business Park** and **Talbot Green Business Park**, both of which are important industrial locations and which offer scope for redevelopment. The Welsh Government has previously acquired buildings at Llantrisant Business Park to enable them to be subdivided for new occupiers.
- The **A470 Corridor,** including Nantgarw and Treforest has long been a popular industrial location. **Treforest Industrial Estate** and **Parc Nantgarw** are reported in the ELR as attracting strong occupier interest. While there is limited land available for expansion, there is scope for significant redevelopment, as evidenced in recent years with the opening of the new DWP headquarters building at Treforest Industrial Estate.

- In the **northern** half of the county, the major strategic site is the large former Tower Colliery site to the south of **Hirwaun.** This is very substantial (c.15 ha of developable land), and the ELR refers to it as offering "the potential to be a major employment node for the Valleys", especially in the context of the improvements to the A465 Heads of the Valleys road, which are nearing completion. In addition, there is further industrial availability at Hirwaun Industrial Estate. However, demand in the north of the county is traditionally seen as much weaker than along the M4 and southern A470 corridors), with the ELR noting that *"rental values remain low and there has been a lack of investment in new property. Demand is very localised and focused on smaller industrial units."*

Metro

Rhondda Cynon Taf will benefit significantly from the South Wales Metro, through improved frequencies on the Merthyr, Aberdare and Treherbert lines (leading to 'metro frequency' services (up to 12 trains per hour) between Pontypridd and Cardiff), greater reliability, and access to more integrated and accessible transport (for example, through the delivery of the new transport interchange at Porth and the relocation of Treforest Estate station). There are also plans to extend the Aberdare line to Hirwaun, potentially supporting access to the strategic employment sites there, with the longer-term potential (outside of the current Metro programme) for improved transit services to Llantrisant[97].

These improvements in public transport infrastructure ought to have a major economic benefit. This is principally cast in regional terms, rather than in estimated employment benefits at local level[98], and the general assumption is that the primary benefit to RCT is likely to be in enabling local residents to access jobs (and other opportunities) in Cardiff and elsewhere[99]. However, improved services to Pontypridd and Treforest could offer opportunities for additional employment growth in the county itself. Recent years have seen some office development in Pontypridd (the Llys Cadwyn scheme in the town centre, currently partly occupied by Transport for Wales), and while the ELR takes a very cautious view of future office demand in RCT, the prospect that much better connectivity will lead to investment around the major rail interchanges is plausible.

Public sector regeneration investments

There is currently a significant programme of investment in Cardiff Capital Region, including the delivery of the South Wales Metro network, the CCR City Deal's Wider Investment Fund, investment associated with the UK Shared Prosperity Fund and other strategic schemes such as the Investment Zone around Newport. While this is not necessarily 'additional' to the baseline (since there has been public investment in economic development in the region for many years, and it might reasonably be expected that this would continue in any scenario), the ambitions set

[97] The long-term potential of this has been set out (e.g., Welsh Government (2017), *Rolling Out Our Metro*), but is not included in the current funded programme.
[98] Transport for Wales (September 2022), *Cardiff Capital Region Metro: Programme Strategic Outline Case*
[99] Discussions with RCT Council officers

out in regional strategy and the 25,000 'jobs target' associated with the City Deal suggest that there is a pathway to above-baseline growth. Of particular relevance to the county, this includes the recently approved Northern Valleys Initiative, which seeks to address the viability constraints in bringing forward key sites[100].

Addition of the employment potential of regional investments supported by CCR and other public sources suggests scope for around 1,600 jobs per annum over the baseline across the region. While this should be seen as highly indicative, a rough apportionment by local authority accounting for the location and sectoral profile of specific investments suggests *potential* for around 218 jobs per annum in RCT (414 if they were to be additional to the baseline set out above). This should be seen as notional, however[101].

Wider perspectives on demand

In consultation, local authority officers noted high current demand, especially for industrial space and especially in the south of the county. Vacancy levels within existing stock were also reported to be low, a view also borne out in the Council's Annual Monitoring Reports, which find that average vacancy rates fell by from 16% in 2013/14 to 6.95% in 2018/19, and despite rising somewhat following the pandemic, were still lower than in 2021/22 than they were in 2015/16[102].

However, vacancy rates vary across the county. Officers highlighted the risk of ageing/ obsolete stock potentially driving disinvestment, especially in those parts of the county (the northern half in general and the Rhondda Valley in particular) where the viability of new development or extensive refurbishment is weakest. In consultation as part of the ELR, agents described demand in RCT as 'patchy', with evidence of relatively good industrial demand pre-pandemic, slowing down more recently.

Replacement Local Development Plan employment growth target

The Council's current jobs target within the emerging Replacement Local Development Plan is stated as 3,990 jobs between 2022 and 2037 (i.e., 266 jobs per annum). This is derived from analysis of the Oxford Economics forecasts purchased as part of the ELR, taking account of additional employment in those sectors that were projected to grow (i.e., excluding the anticipated fall in manufacturing employment). This reflects the judgement that in planning for future employment site allocations, the pattern of demand from 'growth' sectors is likely to be different from that for previous industrial occupiers.

[100] CCR (March 2022), *Seeding a Northern Valleys Initiative*
[101] A further scenario was also developed that adjusted for reduced job losses (relative to the baseline in manufacturing, and higher growth to reflect the recent historic trend in business and professional services. This yielded 483 jobs per annum in RCT, although there is likely to be some double counting of the potential regional investments within this.
[102] AMR, reported in ELR

Identifying a reasonable level of growth

This overview demonstrates a mixed picture in respect of future employment growth in RCT. In summary:

- **Baseline** forecasts suggest growth of around **223 jobs per annum** (within a range of between **104 and 313**). These are all more positive than the earlier baseline projections purchased to inform the Employment Land Review.
- In the **ten years before the pandemic**, an average **235 jobs per annum** were created. Over a 20-year period, this falls to 151, mainly accounted for by losses in manufacturing.
- The Council's current **jobs target** within the emerging RLDP is **266 jobs per annum**, based on gross projected growth (i.e., without including projected manufacturing losses).

There is some consensus across these figures. However, as noted above, there are some significant investments taking place in RCT which could, over time, lead to greater employment demand. The effects of some of these are not yet known: for example, the Heads of the Valleys road improvements (which could drive demand at Hirwaun) are not yet complete, and the impact of Metro investment (arguably greater in terms of connectivity improvements in RCT than in any other CCR local authority area) have not yet come to fruition. This is also true of the emerging City Deal investments.

It is also worth noting that despite the steep long-term decline in manufacturing employment, and productivity gains that are likely to reduce manufacturing job densities over time, the sector has been relatively resilient over the past decade.

Triangulating these different sources of intelligence suggest that it would be reasonable to anticipate growth above the baseline. Taking a mid-point between the upper baseline estimate (313 jobs per annum) and the notional additional contribution of 'known' City Deal projects (441) yields **377 jobs per annum**, which is likely to be at the more optimistic end of a reasonable range. Were this to be achieved, it would probably imply a partial reversal of the loss of manufacturing employment (perhaps in the context of the focus in regional strategy on advanced manufacturing, and an effort to address some of the supply constraints that hold back known demand. It might also suggest further benefits from transport infrastructure improvements than are currently visible in the data.

It should be noted that while around 377 jobs per annum is reasonable and there is a 'pathway' to achieving it, **it is not an 'upper limit':** there may for example be wider policy objectives that the local authority wishes to take into account (such as the need for greater local employment to support higher levels of economic activity). It is also not based on the full range of site-by-site evidence and consultation that would be considered in a detailed study at local level.

Torfaen

Considering the historic trend

In the 20 years leading up to the pandemic, CCR saw a steady increase in the number of jobs. The picture in Torfaen was weaker: the mid-2000s saw substantial contraction, followed by stabilisation in the past decade:

Table 36: Change in jobs, 1999-2019 (average of CE/ Experian/ Oxford estimates)

	Torfaen		CCR	
	JPA	CAGR, %	JPA	CAGR, %
Change 1999-2009	-327	-0.8	4,226	0.6
Change 2009-2019	160	0.4	4,288	0.6
Change 1999-2019	-83	-0.2	4,257	0.6
Total jobs est. 2022	40,184		739,285	

Source: CE/ Experian/ Oxford Economics; SQW analysis. CAGR = compound annual growth rate. JPA = jobs per annum

Table 2 looks more closely at the recent sectoral dynamics within the jobs market, based on official data. The major change has been the loss of manufacturing employment, which accounts for most of the net loss over the 1999-2019 period. In 1999, some 29% of all jobs in Torfaen were in manufacturing: by 2009, this had fallen to 18%, with a total loss of around 4,900 jobs over the period. In the following decade, the manufacturing sector stabilised somewhat, with a much smaller loss in 2009-19 of about 300 jobs (and a consequential fall in the manufacturing sector share of employment to 17%). Nevertheless, Torfaen retains a significant 'over-representation' in manufacturing employment, relative to the UK, Wales and regional averages[103]. These losses in manufacturing have been offset by gains in a diverse range of service sector activities:

Table 37: Change in jobs by sector, 1999-2019 (average of CE/ Experian/ Oxford estimates), jobs per annum

	1999-2009	2009-2019	1999-2019
Manufacturing	-493	-31	-262
Construction	19	21	20
Transport & distribution	5	-3	1

[103] In 2022, the manufacturing 'location quotient' in Torfaen was 2.2, meaning that the sector's share of total jobs in the county was 2.2 times the manufacturing share of employment across Great Britain. This meant that Torfaen was the third most manufacturing-dependent economy in CCR, after Blaenau Gwent and Caerphilly (source: ONS, Business Register and Employment Survey).

	1999-2009	2009-2019	1999-2019
Wholesale & retail	44	22	33
Information & communications	32	42	37
Financial, business & prof services	106	100	103
Public services	59	-67	-4
Other	-98	70	-14
Total	-327	160	-83

Source: CE/ Experian/ Oxford Economics; SQW analysis. Note columns do not sum due to rounding

Identifying a baseline level of growth

Three forecasts were purchased, from Cambridge Econometrics, Experian and Oxford Economics, in November/ December 2023. In the short term (through to 2025), there is considerable divergence between the forecasts, reflecting uncertainty in the light of the long aftermath of the Covid-19 pandemic (which was still relevant in 2022, the last year of 'real' data in the forecast model) and the subsequent energy crisis and conflict in Ukraine.

In the longer term, between 2025 and 2040, there is greater consensus at regional level at the number of jobs per annum that may be achieved (albeit with some variance between the forecasts). The range for Torfaen is between growth of 8 and 109 jobs per annum, with an average of 55:

Table 38: Baseline forecasts (jobs per annum, 2025-40)

	Torfaen	CCR
Cambridge Econometrics	109	3,023
Experian	47	2,520
Oxford Economics	8	1,773
Average	55	2,439

Source : CE/ Experian/ Oxford Economics ; SQW analysis

Previous discussion with SEWPG identified the average as representing a reasonable baseline at regional level.

Breaking the baseline forecasts down by broad sectoral group, there is a continued decline in manufacturing employment, offset by modest growth in other sectors, especially public services:

Table 39: Sectoral breakdown of baseline forecast

	Torfaen, total jobs, 2022	Torfaen, JPA, 2025-40	CCR, JPA, 2025-40
Manufacturing	6,245	-67	-675
Construction	2,326	8	158
Transport & distribution	1,097	2	99
Wholesale & retail	5,058	4	164
Information & communications	962	13	133
Financial, business & professional services	5,329	25	1,022
Public services	14,942	45	914
Other	4,159	25	624
Total	40,184	55	2,439

Source: CE/ Experian/ Oxford Economics; SQW analysis

It should be noted that there is some variance between the three baseline forecasts in the sectoral composition of growth. Although all three forecasting houses anticipate a fall in manufacturing employment, Oxford Economics forecasts a scale of contraction which is 1.9 and 2.5 times greater than that expected by Experian and Cambridge Econometrics respectively. Conversely, Cambridge Econometrics forecasts much stronger growth in public services employment than the other two.

Comparison can also be made with baseline forecasts commissioned by the local authority. To inform the development of the new *Employment Land Review*, prepared for Torfaen by Lichfields, a set of Experian forecasts was purchased in 2023. This anticipated a loss of 1,600 jobs between 2022 and 2037 (-107 jobs per annum)[104]. The largest losses were forecast in manufacturing, wholesale and accommodation and food service, with the largest gains in health, specialised construction, recreation, real estate and professional services. Overall, this set of Experian forecasts is substantially more pessimistic than the forecast purchased as part of this study, despite the similar vintage - highlighting the extent to which future projections vary between forecasting houses and the timing of commission.

[104] Lichfields (March 2024), *Torfaen Employment Land Review*. An earlier set of forecasts prepared by Oxford Economics to inform the *Larger than Local Regional Employment Study* (BE Group on behalf of Blaenau Gwent, Caerphilly, Monmouthshire, Newport and Torfaen, 2020) also included a baseline forecast of -48 jobs per annum in Torfaen between 2018 and 2040.

Prospects for future growth

Evidence informing the Replacement Local Development Plan

Withdrawn RLDP

Torfaen's Replacement Local Development Plan for 2018-33 has been withdrawn, and a new RLDP is currently being prepared. The withdrawn RLDP contained an employment growth target of 179 jobs per annum over the Plan period. This was based on a dwelling-led scenario of 320 homes per annum, and 50 ha of employment land coming forward. This was subsequently translated into a job target using demographic modelling, which derived jobs growth from the implied growth in the working age population.

In its response to the Regulation 15 consultation on the RLDP Preferred Strategy, the Welsh Government noted that *"as the strategy is underpinned by the creation of new employment opportunities, the authority should explain the growth sectors where new jobs will be created and how this aligns with a predicted decline in employment across the region, especially in manufacturing, which is the largest employment sector in Torfaen"*[105].

New RLDP

Work is currently underway to prepare the Preferred Strategy for the new 2022-37 RLDP, which is expected to be adopted in 2026.

To inform the new RLDP, a new *Employment Land Review* has been prepared by Lichfields. This includes a number of future 'labour demand' employment scenarios, as follows[106]:

Table 40: Labour demand scenarios included in the Employment Land Review

Scenario	Rationale	Jobs 2022-37	
		Total	JPA
1: Baseline	Experian baseline forecasts	-1,600	-107
2: Past employment trends	Rolling forward of the historic trend in 2007-22 (based on Experian historic estimates)	-100	-7
3: No netting off for sectors in decline	Adjustment to the baseline scenario so that where the baseline for a specific sector is negative, net jobs are set to zero	800	53

[105] Welsh Government (2021), *Torfaen CBC Preferred Strategy First Review Regulation 15 Consultation: Welsh Government Response*. The reference to anticipated declining employment across the 'region' relates to the Oxford Economics forecasts within the 2020 *Larger than Local Study*, which identified a 1% fall in total employment across Gwent in 2018-40, mainly driven by declines in Torfaen and Blaenau Gwent. However, as observed above, all the baseline forecasts purchased as part of the current study anticipate growth across CCR as a whole, and all anticipate growth (albeit at a modest level) in Torfaen itself.

[106] In addition to a series of labour supply forecasts

Scenario	Rationale	Jobs 2022-37	
4: Key sector scenario	As Scenario 3, *plus* adjustment to growth in a series of identified priority sectors[107] to align with growth in Torfaen or CCR (whichever was the higher) in 2007-22 (or 1997-2022 for land transport, storage and post).	4,831	322

Source: Lichfields (2024), Torfaen Employment Land Review. Note that all job forecasts include B-class and non-B-class jobs.

The ELR recommended that Scenario 4 was the most appropriate to use as a basis for identifying employment land needs. However, it noted that Scenario 4 is explicitly 'policy on', in that it seeks to establish a significant shift from the historic trend through a focus on sectors with scope for growth. It should also be noted that the 'no netting off for sectors in decline' is based on the likelihood that job losses will not necessarily result in a release of land (for example, where losses in manufacturing are due to productivity gain), and that land released due to job losses in one sector will not necessarily be suitable for other jobs in the same use class. In other words, it is an adjustment to account for the *land use* implications of employment change, rather than jobs growth per se.

A *Growth Options Study* is currently being developed by AECOM. Linked with the Council's *Economy and Skills Strategy*, there are also plans to develop an investment prospectus to "present the sites, premises and infrastructure needed to improve productivity in the Borough"[108].

Key locations for growth

East Cwmbran - Grange University Hospital

Identified locations for future employment growth include land around the **Grange University Hospital** at Llanfrechfa, Cwmbran. The Grange was opened in 2020 as a strategic regional specialist and critical care facility, and there are plans for the further expansion of the hospital (17,900 sq m), as well as for the relocation of a 10,000 sq m mental health unit from Caerleon. These medical uses will result in additional jobs in Torfaen, although the majority will not be net additional to the region.

There are aspirations to bring forward opportunities building on the major investment in East Cwmbran including potential for a Regional Science and Technology Park adjacent to the hospital, providing facilities for health-related innovation. A strategic outline case for a medi-park was prepared in 2020, which identified scope for up to 120,000 sq ft of new commercial space, with a commercial site currently being promoted by Medeventures[109]. The SOC

[107] These were defined as those sectors that employed an 'above average' share of the workforce (i.e., large sectors, those that aligned with CCR and Welsh national priorities; and those that consultees identified as having growth potential.
[108] Torfaen CBC (2021), *Torfaen Economy and Skills Strategy 2021-30*
[109] SQW for Torfaen CBC (July 2020), *Strategic Outline Case for a Medi-Park in Torfaen*

anticipated around 300 jobs (gross) through the development of an innovation centre in the first phase, although this could be supplemented substantially as the remainder of the site is developed. The *Economy and Skills Strategy* specifically highlights the medi-park as a strategic opportunity of regional scale, with the site to be reviewed in the new RLDP[110]. The review builds on these proposals and investigations are looking at a wider employment element including a regional Science and Technology Park as part of the significant proposals for eastern expansion of Cwmbran.

Other major sites

In addition to the proposals around the Grange, key locations identified within the current LDP with capacity to grow include:

- In **Cwmbran and the south** of Torfaen:
  - **Llantarnam Business Park** is a well-located and important industrial location to the south of Cwmbran, with one of the highest local concentrations of manufacturing employment in the region. Adjacent to the Business Park, the Llantarnam Strategic Action Area includes 8 hectares of employment land within a proposed mixed-use development. While some housing has been delivered within the SAA, employment uses have so far stalled. Development has however come forward on smaller sites within the existing Business Park itself, including for the new Gwent Police headquarters, which is now complete[111].
- In **Pontypool and the north of Torfaen:**
  - **Mamhilad**, north of Pontypool, which currently accommodates a multi-occupancy business campus within a mid-century office and industrial complex. Additional employment space has been delivered through the Usk Vale business park on the western side of the A4042, although there is scope for a further 3 hectares of development at Mamhilad Business Park.
  - **Blaenavon** accommodates a couple of larger sites, one of which (Gilchrist Thomas) is now developed, with planning permission obtained on part of the Kays and Kears site.

The *Larger than Local Study* prepared in 2020 sought to identify a series of regional 'strategic sites' across the Gwent area, loosely defined as sites that *"will support the development of significant businesses within the area… appropriate in location and size to support key regional sectors"* [112]. Within Torfaen, the Study identified two potential sites, at Llanfrechfa Grange (described above) and Craig y Felin at Cwmbran, which is current proposed for deletion[113]. It

[110] Torfaen CBC (October 2023), *Annual Monitoring Report 2023*
[111] In addition, Craig y Felin is a greenfield site identified in the current LDP as having potential for c.10 ha of employment land off the A4042 at Cwmbran. However, there are significant viability constraints, and the allocation is proposed for deletion within the RLDP.
[112] BE Group (2020), *Larger than Local Regional Employment Study.*
[113] Note that the study also identified the former Ty Coch tip site in Cwmbran as a potential regional strategic site, but discounted it for employment use given existing permission for solar farm use.

should be noted that these are fewer and, in aggregate, smaller than the sites identified in neighbouring authorities.

Through the call for candidate sites for the new RLDP, five new sites have been proposed in addition to those already within LDP allocations. Of these, three are in Cwmbran (48.2 ha) and two are in Pontypool (12.4 ha)[114].

Cwmbran town centre

Cwmbran is an important regional centre and the largest town in CCR north of the M4[115]. It was designated as a 'regional hub' by the former Valleys Task Force, and has administrative and retail functions that serve a wider hinterland, which are potentially reinforced by the health investment at Llanfrechfa, and has seen substantial housing growth in recent years. Generally, the town centre is seen as well-performing, despite structural change in the retail sector, although the *Larger than Local Study* observed weak office demand and an excess of office stock.

In the context of the 'Town Centres First' policy within *Future Wales* (Policy 9), there is potentially scope to expand employment activity within the town centre, linked with its locational advantages.

Demand perspectives

The most recent Annual Monitoring Report observes that delivery of employment sites is proceeding more slowly than anticipated[116]. However, this appears to be at variance with some demand signals. For example, local authority officers report that there is generally a high volume of enquiries, especially for Cwmbran and the southern part of Torfaen, which cannot currently be accommodated due to a shortage of suitable sites which can be brought forward in the near term. This is reflected in agent perspectives in the *Larger than Local Study*, which noted healthy reported demand for industrial stock at Llantarnam, but found that *"consultations with stakeholders have indicated a lack of available industrial supply throughout the region, which is hindering growth and take-up in the market"*[117]. Likewise, the ELR notes *"a shortage of existing factory premises and land for the development of new factories, [which] is considered to be creating problems for businesses in Torfaen that are interested in expanding"*[118].

This is potentially exacerbated in Torfaen as a result of the more acute shortage of stock availability. the 2023 AMR observes that *"whilst the allocated sites have yet to be developed there is an identified lack of available sites for new development".*

[114] Torfaen CBC
[115] Torfaen CBC (August 2023), *Sustainable Settlement Assessment*
[116] Torfaen CBC (October 2023), *Annual Monitoring Report 2023*
[117] Note that consultation on the *Larger than Local Study* was carried out pre-pandemic and is now somewhat dated, although similar sentiments have been expressed by the Council.
[118] Lichfields (2024), *Torfaen Employment Land Review*, p.85

The *Larger than Local Study* also highlighted the importance of accessibility as a driver of demand, which is relevant to Torfaen (and the southern half especially). In particular, it noted congestion at the Bryn Glas tunnels on the M4 as a consideration in location decisions, with the observation that there ought to be higher demand in areas accessible to the M4 east of Bryn Glas. Cwmbran ought to be well-positioned to take advantage of this, although the Council considers that availability shortages place a brake on this materialising.

Major regional investments

There is currently a significant programme of investment in Cardiff Capital Region, including the delivery of the South Wales Metro network, the CCR City Deal's Wider Investment Fund, investment associated with the UK Shared Prosperity Fund and other strategic schemes such as the Investment Zone around Newport. While this is not necessarily 'additional' to the baseline (since there has been public investment in economic development in the region for many years, and it might reasonably be expected that this would continue in any scenario), the ambitions set out in regional strategy and the 25,000 'jobs target' associated with the City Deal suggest that there is a pathway to above-baseline growth. Of particular relevance to Torfaen, this includes the recently approved Northern Valleys Initiative, which seeks to address the viability constraints in bringing forward key sites, and the significant investment in the compound semiconductor cluster just over the border in Newport[119].

Addition of the employment potential of regional investments supported by CCR and other public sources suggests scope for around 1,600 jobs per annum over the baseline across the region. While this should be seen as highly indicative, a rough apportionment by local authority accounting for the location and sectoral profile of specific investments suggests *potential* for around 108 jobs per annum in Torfaen (i.e., 163 jobs per annum in total, if these were to be additional to the baseline set out above). This should be seen as notional, however[120].

Identifying a reasonable level of growth

This overview demonstrates quite a complicated employment growth picture for Torfaen, with some imbalance between historic and forecast data and the *potential* for future growth within a market which is seen as supply constrained. In summary:

- **Baseline** forecasts suggest modest growth of around **55 jobs per annum** (within a range of between **8 and 109**). These are all more positive than the baseline projections purchased to inform the Employment Land Review and the forecasts contained in the *Larger than Local Study*, both of which anticipated net employment contraction.

[119] CCR (March 2022), *Seeding a Northern Valleys Initiative*. Note that the Northern Valleys Initiative includes all six Valleys authorities, including Torfaen.

[120] A further scenario was also developed that adjusted for reduced job losses (relative to the baseline in manufacturing, and higher growth to reflect the recent historic trend in business and professional services. This yielded 172 jobs per annum in Torfaen, although there is likely to be some double counting of the potential regional investments within this.

- In the **ten years before the pandemic**, an average **160 jobs per annum** were created. Over a 20-year period, this is converted to an average annual loss of 83 jobs per annum, almost entirely accounted for by losses in manufacturing.
- The **recommended labour demand scenario** within the Employment Land Review is **322 jobs per annum**. This is an explicitly 'policy-on' scenario, focusing on growth in key sectors and reversing projected sector decline. This compares with a jobs target of 179 jpa in the withdrawn RLDP.

It is likely that the new ELR will shed further light on potential demand evidence. It is however plausible that growth could be created above the baseline: while manufacturing has contracted significantly over the long run, it has stabilised in recent years; there is evidence of unmet demand, despite the theoretical availability of sites; and there is scope to build on Cwmbran's relatively strong town centre and the substantial residential growth taking place there. There is also a strong programme of regional investment which could help to address some of the viability constraints impacting on the availability of sites and premises.

Triangulating these different sources of intelligence suggest that it would be reasonable to expect growth above the baseline. Rounding up from the ten-year historic trend and the notional jobs impact of regional investment would suggest around **170 jobs per annum.** This would be higher than any of the baseline forecasts, and would suggest continued stabilisation of manufacturing employment and/ or the delivery of additional employment land. This is lower than the recommended labour demand scenario modelled in the ELR, albeit as referenced above this is acknowledged as a 'policy-on' scenario.

It should be noted that while around 170 jobs per annum is reasonable and there is a 'pathway' to achieving it, **it is not an 'upper limit':** there may for example be wider policy objectives that the local authority wishes to take into account (such as the need for greater local employment to support higher levels of economic activity), and these are part of the considerations behind the higher level of growth in the ELR recommended scenario. It is also not based on the full range of site-by-site evidence and consultation that would be considered in a detailed study at local level.

Vale of Glamorgan

Considering the historic trend

In the 20 years leading up to the pandemic, jobs growth across CCR was significantly stronger than the baseline projection. The picture in the Vale of Glamorgan was weaker overall. However, while the period before the financial crisis saw a significant loss of jobs (especially at the start of the 2000s), the period after 2009 saw growth at above the regional average:

Table 41: Change in jobs, 1999-2019 (average of CE/ Experian/ Oxford estimates)

	Vale of Glamorgan		CCR	
	JPA	CAGR, %	JPA	CAGR, %
Change 1999-2009	-494	-1.0	4,226	0.6
Change 2009-2019	350	0.8	4,288	0.6
Change 1999-2019	-72	-0.1	4,257	0.6
Total jobs est. 2022	49,063		739,285	

Source: CE/ Experian/ Oxford Economics; SQW analysis. CAGR = compound annual growth rate

Table 2 looks more closely at pre-pandemic sectoral dynamics within the jobs market. The early 2000s saw significant losses in manufacturing employment (especially in the early part of the decade). The sector has stabilised subsequently however, with strong growth in the decade to 2019 in business and professional services and in areas such as hospitality and public service activities:

Table 42: Change in jobs by sector, 1999-2019 (average of CE/ Experian/ Oxford estimates), jobs per annum

	1999-2009	2009-2019	1999-2019
Manufacturing	-361	20	-171
Construction	-18	19	0
Transport & distribution	57	-24	16
Wholesale & retail	-53	-75	-64
Information & communications	19	14	17
Financial, business & prof services	-19	129	55
Public services	-12	92	40
Other	-103	172	34

	1999-2009	2009-2019	1999-2019
Total	**-494**	**350**	**-72**

Source: CE/ Experian/ Oxford Economics; SQW analysis. Note that columns do not sum due to rounding in the sectoral estimates

Identifying a baseline level of growth

Three forecasts were purchased, from Cambridge Econometrics, Experian and Oxford Economics, in November/ December 2023. In the short term (through to 2025), there is considerable divergence between the forecasts, reflecting uncertainty in the light of the long aftermath of the Covid-19 pandemic (which was still relevant in 2022, the last year of 'real' data in the forecast model) and the subsequent energy crisis and conflict in Ukraine.

In the longer term, between 2025 and 2040, there is greater consensus at regional level at the number of jobs per annum that may be achieved. The range for the Vale of Glamorgan is between 60 and 218 jobs per annum, with an average of 130:

Table 43: Baseline forecasts (jobs per annum, 2025-40)

	Vale of Glamorgan	CCR
Cambridge Econometrics	218	3,023
Experian	60	2,520
Oxford Economics	111	1,773
Average	130	2,439

Source: CE/ Experian/ Oxford Economics; SQW analysis

Previous discussion with SEWPG identified the average as representing a reasonable baseline at regional level.

Breaking the baseline forecasts down by broad sectoral group, there is a further decline in manufacturing employment (consistent with the baseline picture for CCR as a whole), offset by continued growth in service activities.

Table 44: Sectoral breakdown of baseline forecast (based on average of forecasts)

	Vale, total jobs, 2022	Vale, JPA, 2025-40	CCR, JPA, 2025-40
Manufacturing	3,977	-33	-675
Construction	3,267	12	158
Transport & distribution	2,157	11	99
Wholesale & retail	6,085	3	164

	Vale, total jobs, 2022	Vale, JPA, 2025-40	CCR, JPA, 2025-40
Information & communications	1,236	9	133
Financial, business & professional services	7,857	41	1,022
Public services	16,030	52	914
Other	8,463	36	624
Total	49,063	130	2,439

Source: CE/ Experian/ Oxford Economics; SQW analysis

It should be noted however that there is substantial variance between the three forecasting houses on the sectoral composition of future employment growth, with Oxford Economics anticipating a sharper reorientation away from manufacturing towards service activities and Experian projecting a contraction in retail and wholesale employment.

These baseline forecasts are somewhat more 'optimistic' than the baseline projections used to support the Vale of Glamorgan's *Employment Land Study,* completed in 2023[121]. This used forecasts commissioned from Oxford Economics, which anticipated total employment growth of 463 between 2021 and 2036 (i.e., 31 jobs per annum), with growth focused on health, accommodation and food and professional and scientific services, offset by contraction in manufacturing, public administration and transport and logistics. This highlights the extent to which future projections vary between forecasting houses and according to the year of commission; the *Employment Land Study* also noted the variance between baseline forecast growth and recent experience, as the data above also demonstrates.

Prospects for future growth

Major planned and potential investment

There is currently a significant programme of investment in Cardiff Capital Region, including the delivery of the South Wales Metro network and the CCR City Deal's Wider Investment Fund. While this is not necessarily 'additional' to the baseline (since there has been public investment in economic development in the region for many years, and it might reasonably be expected that this would continue in any scenario), the ambitions set out in regional strategy and the 25,000 'jobs target' associated with the City Deal suggest that there is a pathway to above-baseline growth.

[121] BE Group (March 2023), *Vale of Glamorgan Employment Land Study*

In the Vale of Glamorgan, there are several major planned investments (and investments that are underway, but which have not yet delivered their full potential in terms of employment growth). These include:

Cardiff Airport, Bro Tathan and Model Farm

Bro Tathan is a 486 hectare site on former Ministry of Defence land, adjacent to Cardiff Airport. Policy 10 of *Future Wales* recognises Cardiff Airport's national strategic role, and also highlights Bro Tathan's role as offering a wide range of development sites and business accommodation. In 2012, Bro Tathan and Cardiff Airport itself were together designated as an Enterprise Zone. Bro Tathan is owned and managed by the Welsh Government, while the Cardiff Airport part of the Enterprise Zone is in multiple ownership, including the Welsh Government, Vale of Glamorgan Council and the private sector[122].

At **Bro Tathan,** current major occupiers include the car manufacturer Aston Martin Lagonda (with about 700 jobs) and the aircraft maintenance companies Caerdav and eCube Solutions, alongside a number of other, mainly technology and engineering, businesses[123].

While significant commercial investment has come forward, there have been some planned job losses at Bro Tathan, as the defence activities on the site contract (for example, with the recent relocation of the RAF's training school)[124]. However, there is a current planning application for a 67,227 sq m data centre on the final plot of the northern part of the site , which is expected to create 120 jobs. Across the Bro Tathan site in total, including the land about to be vacated by the MoD, the agents for the Welsh Government estimate potential capacity (based on existing permissions and sites which are likely to come forward) for around 10,200 jobs over the RLDP period to 2036[125]. This is also likely to include some additional services, as well as industrial employment[126].

These numbers ought to be seen as very indicative: they are based on potential floorspace and standard jobs densities, although job densities in 'high-value manufacturing' are likely to be lower than in other parts of the manufacturing sector (albeit at higher levels of productivity and pay).

In addition, there is committed investment in a new Advanced Technology Centre to be delivered by Cardiff and Vale College on the Cardiff Airport part of the Enterprise Zone.

East of Cardiff Airport, **Model Farm** has been subject to previous proposals for a 45 hectare business park. The ELS notes that there remains investor interest in bringing this forward in a

[122] Note that there are currently no Enterprise Zone tax incentives applying to the site, although it remains a Welsh Government investment priority.
[123] Bro Tathan (brotathan.wales); BE Group (2023), *Employment Land Study*
[124] The *Employment Land Study* notes an anticipated reduction from c. 1,200 on site to c.420 when the RAF exit by the end of 2023/24.
[125] Correspondence from Carney Sweeney to Vale of Glamorgan Council (August 2023)
[126] The *ELS* notes the current lack of service provision at Bro Tathan as a potential barrier in attracting investment.

scheme which could potentially complement the activity cited earlier at Bro Tathan. A planning application for the business park is currently subject to a planning appeal for non-determination.

Aberthaw

Aberthaw is a 198 hectare site, located to the east of Cardiff Airport and Bro Tathan, and including a decommissioned coal-fired power station and associated facilities, with rail access. In 2022, it was acquired by CCR Energy (a special purpose vehicle owned by the ten CCR local authorities), using City Deal funds.

The Aberthaw presents several opportunities, give its connections to the electricity grid, rail access and stock of developable land. CCR describes Aberthaw as offering the potential to become a "zero-carbon manufacturing cluster"[127], with the emerging masterplan identifying scope for energy-related projects, such as renewable power generation and storage and battery manufacture, alongside other employment uses[128]. Overall, CCR estimate that the site could generate up to 5,000 jobs.

While major investment is now committed to the site and work is underway, information regarding future employment generation remains at high level, the range of potential uses is quite broad and the project will be long-term. However, there is evidence of demand for large-scale, well-connected sites suitable for low-carbon advanced manufacturing (see, for example, Jaguar Land Rover's recent investment in the Gravity site in Somerset for battery production)[129].

Other major potential investments

Beyond these two schemes of regional significance, other major investments with the potential to generate significant additional employment include:

- **Development adjacent to Renishaw:** Renishaw is a software development and manufacturing company, creating high precision technology for metrology and healthcare. The company currently has a factory and R&D facility at Junction 34 of the M4 near Hensol, employing about 650 people. In 2022, Renishaw announced a programme of expansion at the Hensol site, running until the end of 2024. In addition, there is a lapsed planning consent, which is subject to an application for an extension of time, for development on a further 50 hectares, which could potentially support supply chain and other relevant activity. The ELS references scope for an additional "450-500" jobs within existing permissions: the scale of employment generation on the adjacent site is unclear, although the Council reports that there continues to be interest from Renishaw in bringing it forward.
- **Developments in Barry:** As noted elsewhere in South Wales, ABP is seeking to take a more proactive approach to the development of its port holdings, including through their

[127] Cardiff Capital Region (2022)
[128] The Urbanists/ CCR Energy (2023), The Leys, Aberthaw: Masterplan [Draft]
[129] There is also evidence of relevant enquiries in the vicinity (e.g., British Volt's previous interest in Bro Tathan).

exploitation for low-carbon industrial opportunities. At Barry, ABP's *Future Ports Vision* includes a 'Clean Growth Hub' alongside the chemicals site owned by Dow and including Dow's operations and those of other chemicals firms. The *Vision* describes an ambition to *"rebuild site activity levels to the more intense uses seen in the 1970s, but with a focus on zero or low carbon manufacturing rather than petrochemicals"*, with scope for energy generation, hydrogen import and a proposed carbon capture, utilisation and storage facility[130].

Vale of Glamorgan Council's own *Investment Plan* also highlights an initial focus on Barry, including through projects to bring forward additional innovation and 'grow-on' space, linked with the wider placemaking strategy for the town[131].

- **South East Wales Food Park:** There is a reported shortage of factory units for food production, within a sector that has experienced growth in recent years[132]. Consequently, several proposals have been advanced in Wales for food production parks, and discussions have been advanced in relation to a rural business park facility at Cowbridge. Potentially, this could be of 'regional' scale[133].

Replacement Local Development Plan employment growth target

Based on average annual take-up rates for 1996-2021, the ELS identified a land requirement of 67.8 hectares in 2021-36. Converting this into jobs based on use class assumptions and standard employment densities yielded estimated capacity for 5,338 jobs over the RLDP period (i.e., 356 jobs per annum). This is included as the employment growth 'target' within the RLDP Preferred Strategy[134].

Identifying a reasonable level of growth

The overview of major opportunities above demonstrates that there is significant potential for employment growth within the county, and that much of this is likely to be driven by strategic investments of regional scale, as well as by incremental growth. While some of these developments are still at a relatively early stage (for example, the ultimate nature of job creation at Aberthaw may not be known for some time), there is potential for a change in the trajectory of employment in the Vale. There is also evidence that recent employment growth has been stronger than it has been over the longer term, with manufacturing employment stabilising following some large job losses in the early 2000s.

[130] ABP, *Future Ports Barry: Triggering a virtuous growth cycle for the town and Port*
[131] Vale of Glamorgan Council (2023), *Non-Treasury Investment Strategy and Investment Plan*
[132] Cardiff Metropolitan University, quoted in the ELS
[133] The ELS notes previous discussions with local authorities elsewhere in CCR, and suggests that the scale of a food park at Cowbridge could be around 3.2 ha.
[134] Vale of Glamorgan Council (2023), *Replacement Local Development Plan – Preferred Strategy*. See Policy SP1, p.63

This suggests that employment growth over to 2040 could be substantially greater than the baseline, which (at the average of the three forecasts) only anticipates half the level of employment growth experienced in the ten years up to the pandemic.

Establishing the scale of this potential growth is challenging: as noted above, employment densities in some advanced manufacturing activities are likely to lower than historically assumed, and not all employment growth will come forward in the period to 2040. However:

- Both the capacity-based estimate identified in the ELS and ten-year historic trend (2009-2019) suggest potential for around 350 jobs per annum (346 and 356 respectively)
- Addition of the employment potential of those regional investments supported by CCR and other regional public investment suggests scope for around 1,600 jobs per annum over the baseline across the region. While this should be seen as highly indicative, a rough apportionment by local authority accounting for the location and sectoral profile of specific investments suggests *potential* for around 368 jobs per annum in the Vale (238 over the baseline)[135].

It appears reasonable to assume that future growth is likely to be equal to or greater than the recent historic trajectory and the analysis in the ELS, noting that the ELS is of recent vintage. Taking account of potential regional investment, and noting some caution on the timing and job density of the major projects, **growth in the order of 370 jobs per annum is likely to be reasonable**. It is also possible that this will involve some reversal of the historic trend towards losses in the manufacturing sector, given the focus of potential investment at Bro Tathan and elsewhere.

It should be noted that while 370 jobs per annum is reasonable and there is a clear 'pathway' to achieving it, it is not an 'upper limit': there may for example be wider policy objectives that the local authority wishes to take into account (such as the need for greater local employment to support higher levels of economic activity). It is also not based on the full range of site-by-site evidence and consultation that would be considered in a detailed study at local level.

[135] A further scenario was also developed that adjusted for reduced job losses (relative to the baseline) in manufacturing, and higher growth to reflect the recent historic trend in business and professional services. This yielded 426 jobs per annum, although there is likely to be some double-counting of the potential regional investments within this.

Appendix 3: POPGROUP Authority Scenario Outputs

Blaenau Gwent

Scenario	Population				Average Annual Net Migration	Labour Force				Employed People				Employment (jobs)					Double Jobbing	Jobs per year	Jobs Growth
	2022	2040	Change	% Change		2022	2040	Change	% Change	2022	2040	Change	% Change	2022	2040	Change	% Change	Annual average			
Higher Potential Job Growth	67,014	72,230	5,216	7.8%	488	31,242	34,132	2,889	9.2%	30,242	32,801	2,558	8.5%	20,756	22,512	1,756	8.5%	98	1.03	100	1,800
Baseline Job Growth	67,014	67,175	161	0.2%	234	31,242	31,419	177	0.6%	30,242	30,194	-49	-0.2%	20,756	20,723	-33	-0.2%	-2	1.03	-2	-34
PG-Long-Term	67,014	66,610	-404	-0.6%	208	31,242	31,148	-94	-0.3%	30,242	29,933	-309	-1.0%	20,756	20,544	-212	-1.0%	-12	1.03	-12	-217
PG-Short-Term	67,014	65,324	-1,690	-2.5%	152	31,242	30,222	-1,020	-3.3%	30,242	29,043	-1,199	-4.0%	20,756	19,933	-823	-4.0%	-46	1.03	-47	-844
WG-2018	69,548	69,157	-391	-0.6%	219	32,468	32,076	-393	-1.2%	31,429	30,825	-605	-1.9%	21,571	21,156	-415	-1.9%	-23	1.03	-24	-425

Bridgend

Scenario	Population				Average Annual Net Migration	Labour Force				Employed People				Employment (jobs)					Double Jobbing	Jobs per year	Jobs Growth
	2022	2040	Change	% Change		2022	2040	Change	% Change	2022	2040	Change	% Change	2022	2040	Change	% Change	Annual average			
Higher Potential Job Growth	146,136	161,426	15,290	10.5%	1,294	70,490	78,648	8,158	11.6%	68,304	76,131	7,826	11.5%	60,859	67,832	6,973	11.5%	387	1.03	400	7,200
Baseline Job Growth	146,136	152,105	5,969	4.1%	822	70,490	73,499	3,010	4.3%	68,304	71,147	2,843	4.2%	60,859	63,392	2,533	4.2%	141	1.03	145	2,615
PG-Long-Term	146,136	155,112	8,976	6.1%	973	70,490	75,145	4,656	6.6%	68,304	72,741	4,436	6.5%	60,859	64,812	3,953	6.5%	220	1.03	227	4,081
PG-Short-Term	146,136	153,816	7,680	5.3%	911	70,490	73,985	3,495	5.0%	68,304	71,617	3,313	4.9%	60,859	63,811	2,952	4.9%	164	1.03	169	3,048
WG-2018	147,892	157,328	9,436	6.4%	977	71,125	75,211	4,086	5.7%	68,920	72,805	3,885	5.6%	61,407	64,868	3,461	5.6%	192	1.03	199	3,574

Caerphilly

Scenario	Population				Average Annual Net Migration	Labour Force				Employed People				Employment (jobs)					Double Jobbing	Jobs per year	Jobs Growth
	2022	2040	Change	% Change		2022	2040	Change	% Change	2022	2040	Change	% Change	2022	2040	Change	% Change	Annual average			
Higher Potential Job Growth	176,130	184,164	8,034	4.6%	833	84,593	89,638	5,045	6.0%	81,632	86,590	4,958	6.1%	68,475	72,634	4,159	6.1%	231	1.03	238	4,284
Baseline Job Growth	176,130	177,547	1,417	0.8%	501	84,593	85,934	1,341	1.6%	81,632	83,012	1,380	1.7%	68,475	69,633	1,158	1.7%	64	1.03	66	1,192
PG-Long-Term	176,130	178,970	2,840	1.6%	570	84,593	86,699	2,106	2.5%	81,632	83,751	2,119	2.6%	68,475	70,253	1,777	2.6%	99	1.03	102	1,831
PG-Short-Term	176,130	171,687	-4,443	-2.5%	211	84,593	82,967	-1,626	-1.9%	81,632	80,146	-1,486	-1.8%	68,475	67,229	-1,247	-1.8%	-69	1.03	-71	-1,284
WG-2018	182,060	184,340	2,281	1.3%	354	87,553	88,490	938	1.1%	84,488	85,482	993	1.2%	70,871	71,704	833	1.2%	46	1.03	48	858

Cardiff

Scenario	Population				Average Annual Net Migration	Labour Force				Employed People				Employment (jobs)					Double Jobbing	Jobs per year	Jobs Growth
	2022	2040	Change	% Change		2022	2040	Change	% Change	2022	2040	Change	% Change	2022	2040	Change	% Change	Annual average			
Higher Potential Job Growth	372,089	417,511	45,422	12.2%	1,464	195,381	227,192	31,811	16.3%	187,370	218,104	30,734	16.4%	228,214	265,647	37,433	16.4%	2,080	1.04	2,173	39,114
Baseline Job Growth	372,089	396,237	24,148	6.5%	427	195,381	214,334	18,953	9.7%	187,370	205,761	18,390	9.8%	228,214	250,613	22,399	9.8%	1,244	1.04	1,300	23,405
PG-Long-Term	372,089	392,154	20,065	5.4%	209	195,381	211,740	16,359	8.4%	187,370	203,270	15,900	8.5%	228,214	247,580	19,366	8.5%	1,076	1.04	1,124	20,236
PG-Short-Term	372,089	405,001	32,912	8.8%	804	195,381	218,480	23,100	11.8%	187,370	209,741	22,371	11.9%	228,214	255,461	27,248	11.9%	1,514	1.04	1,582	28,471
WG-2018	368,090	386,861	18,771	5.1%	62	192,274	206,093	13,819	7.2%	184,391	197,850	13,459	7.3%	224,585	240,977	16,392	7.3%	911	1.04	952	17,128

Merthyr Tydfil

Scenario	Population				Average Annual Net Migration	Labour Force				Employed People				Employment (jobs)					Double Jobbing	Jobs per year	Jobs Growth
	2022	2040	Change	% Change		2022	2040	Change	% Change	2022	2040	Change	% Change	2022	2040	Change	% Change	Annual average			
Higher Potential Job Growth	58,883	62,253	3,370	5.7%	266	27,998	30,292	2,294	8.2%	26,934	29,111	2,177	8.1%	25,991	28,091	2,101	8.1%	117	1.03	120	2,160
Baseline Job Growth	58,883	60,204	1,321	2.2%	163	27,998	29,170	1,172	4.2%	26,934	28,032	1,098	4.1%	25,991	27,050	1,060	4.1%	59	1.03	61	1,090
PG-Long-Term	58,883	60,547	1,664	2.8%	181	27,998	29,358	1,360	4.9%	26,934	28,213	1,279	4.7%	25,991	27,225	1,234	4.7%	69	1.03	71	1,269
PG-Short-Term	58,883	57,784	-1,099	-1.9%	44	27,998	27,798	-199	-0.7%	26,934	26,714	-219	-0.8%	25,991	25,779	-212	-0.8%	-12	1.03	-12	-218
WG-2018	60,919	63,154	2,235	3.7%	164	28,724	30,001	1,277	4.4%	27,633	28,831	1,198	4.3%	26,665	27,821	1,156	4.3%	64	1.03	66	1,189

Monmouthshire

Scenario	Population				Average Annual Net Migration	Labour Force				Employed People				Employment (jobs)					Double Jobbing	Jobs per year	Jobs Growth
	2022	2040	Change	% Change		2022	2040	Change	% Change	2022	2040	Change	% Change	2022	2040	Change	% Change	Annual average			
Higher Potential Job Growth	93,886	102,487	8,601	9.2%	970	48,148	52,852	4,704	9.8%	46,848	51,583	4,735	10.1%	45,666	50,282	4,616	10.1%	256	1.05	270	4,860
Baseline Job Growth	93,886	98,151	4,265	4.5%	741	48,148	50,337	2,189	4.5%	46,848	49,129	2,281	4.9%	45,666	47,889	2,223	4.9%	124	1.05	130	2,341
PG-Long-Term	93,886	99,928	6,042	6.4%	835	48,148	51,360	3,212	6.7%	46,848	50,127	3,279	7.0%	45,666	48,863	3,196	7.0%	178	1.05	187	3,366
PG-Short-Term	93,886	99,931	6,045	6.4%	834	48,148	51,191	3,043	6.3%	46,848	49,962	3,114	6.6%	45,666	48,702	3,035	6.6%	169	1.05	178	3,196
WG-2018	95,489	100,492	5,004	5.2%	789	48,515	50,919	2,404	5.0%	47,205	49,697	2,491	5.3%	46,015	48,443	2,429	5.3%	135	1.05	142	2,557

Newport

Scenario	Population				Average Annual Net Migration	Labour Force				Employed People				Employment (jobs)					Double Jobbing	Jobs per year	Jobs Growth
	2022	2040	Change	% Change		2022	2040	Change	% Change	2022	2040	Change	% Change	2022	2040	Change	% Change	Annual average			
Higher Potential Job Growth	161,506	175,044	13,538	8.4%	482	82,428	90,996	8,568	10.4%	78,719	87,083	8,364	10.6%	83,496	92,368	8,872	10.6%	493	1.03	509	9,162
Baseline Job Growth	161,506	169,722	8,216	5.1%	220	82,428	87,934	5,506	6.7%	78,719	84,153	5,434	6.9%	83,496	89,260	5,764	6.9%	320	1.03	331	5,953
PG-Long-Term	161,506	174,168	12,662	7.8%	432	82,428	90,428	8,000	9.7%	78,719	86,540	7,821	9.9%	83,496	91,792	8,296	9.9%	461	1.03	476	8,567
PG-Short-Term	161,506	184,381	22,875	14.2%	929	82,428	96,932	14,504	17.6%	78,719	92,764	14,045	17.8%	83,496	98,394	14,898	17.8%	828	1.03	855	15,385
WG-2018	158,154	174,290	16,136	10.2%	600	79,384	88,583	9,199	11.6%	75,812	84,774	8,962	11.8%	80,413	89,919	9,506	11.8%	528	1.03	545	9,817

RCT

Scenario	Population				Average Annual Net Migration	Labour Force				Employed People				Employment (jobs)					Double Jobbing	Jobs per year	Jobs Growth
	2022	2040	Change	% Change		2022	2040	Change	% Change	2022	2040	Change	% Change	2022	2040	Change	% Change	Annual average			
Higher Potential Job Growth	239,018	253,229	14,211	5.9%	1,176	113,311	122,724	9,414	8.3%	109,571	118,552	8,981	8.2%	80,345	86,930	6,585	8.2%	366	1.03	377	6,786
Baseline Job Growth	239,018	246,497	7,479	3.1%	846	113,311	118,930	5,620	5.0%	109,571	114,886	5,315	4.9%	80,345	84,243	3,897	4.9%	217	1.03	223	4,016
PG-Long-Term	239,018	244,187	5,169	2.2%	728	113,311	117,578	4,268	3.8%	109,571	113,581	4,009	3.7%	80,345	83,285	2,940	3.7%	163	1.03	168	3,030
PG-Short-Term	239,018	247,763	8,745	3.7%	974	113,311	119,683	6,372	5.6%	109,571	115,614	6,042	5.5%	80,345	84,776	4,431	5.5%	246	1.03	254	4,566
WG-2018	242,784	252,418	9,634	4.0%	771	115,123	121,040	5,917	5.1%	111,324	116,925	5,601	5.0%	81,630	85,737	4,107	5.0%	228	1.03	235	4,232

Torfaen

Scenario	Population				Average Annual Net Migration	Labour Force				Employed People				Employment (jobs)					Double Jobbing	Jobs per year	Jobs Growth
	2022	2040	Change	% Change		2022	2040	Change	% Change	2022	2040	Change	% Change	2022	2040	Change	% Change	Annual average			
Higher Potential Job Growth	92,860	97,052	4,192	4.5%	433	45,488	48,262	2,774	6.1%	43,623	46,670	3,047	7.0%	42,467	45,433	2,966	7.0%	165	1.03	170	3,060
Baseline Job Growth	92,860	93,279	419	0.5%	243	45,488	46,123	635	1.4%	43,623	44,601	978	2.2%	42,467	43,419	952	2.2%	53	1.03	55	982
PG-Long-Term	92,860	93,790	930	1.0%	268	45,488	46,408	920	2.0%	43,623	44,877	1,254	2.9%	42,467	43,687	1,220	2.9%	68	1.03	70	1,259
PG-Short-Term	92,860	99,564	6,704	7.2%	569	45,488	49,496	4,008	8.8%	43,623	47,863	4,240	9.7%	42,467	46,594	4,128	9.7%	229	1.03	237	4,258
WG-2018	94,111	97,585	3,474	3.7%	392	45,899	47,536	1,637	3.6%	44,017	45,967	1,950	4.4%	42,851	44,749	1,898	4.4%	105	1.03	109	1,959

Vale of Glamorgan

Scenario	Population				Average Annual Net Migration	Labour Force				Employed People				Employment (jobs)					Double Jobbing	Jobs per year	Jobs Growth
	2022	2040	Change	% Change		2022	2040	Change	% Change	2022	2040	Change	% Change	2022	2040	Change	% Change	Annual average			
Higher Potential Job Growth	133,492	146,519	13,027	9.8%	1,001	67,590	75,582	7,993	11.8%	65,427	73,466	8,039	12.3%	51,963	58,348	6,385	12.3%	355	1.04	370	6,660
Baseline Job Growth	133,492	137,313	3,821	2.9%	533	67,590	70,212	2,623	3.9%	65,427	68,246	2,820	4.3%	51,963	54,202	2,239	4.3%	124	1.04	130	2,336
PG-Long-Term	133,492	141,406	7,914	5.9%	736	67,590	72,532	4,943	7.3%	65,427	70,501	5,075	7.8%	51,963	55,993	4,030	7.8%	224	1.04	234	4,204
PG-Short-Term	133,492	146,790	13,298	10.0%	1,008	67,590	74,996	7,406	11.0%	65,427	72,896	7,469	11.4%	51,963	57,895	5,932	11.4%	330	1.04	344	6,188
WG-2018	135,617	146,527	10,910	8.0%	840	68,989	74,625	5,637	8.2%	66,781	72,536	5,755	8.6%	53,038	57,609	4,570	8.6%	254	1.04	265	4,767

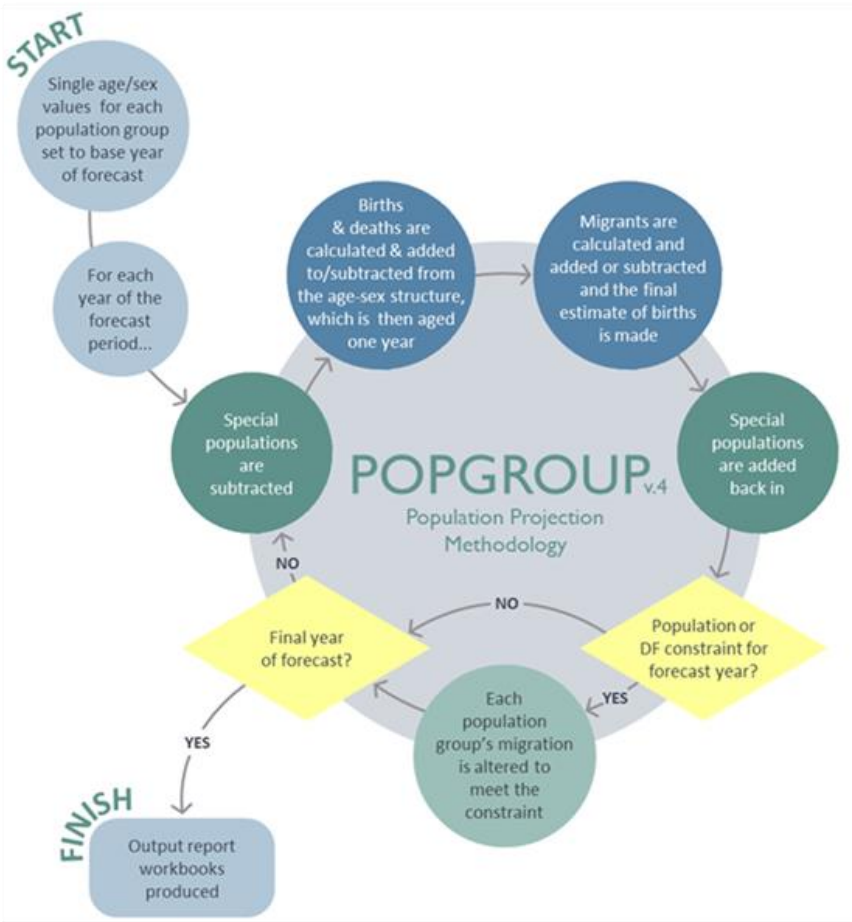
Appendix 4: POPGROUP Assumptions Note

POPGROUP

Using POPGROUP forecasting technology, five growth scenarios have been developed for each of the 10 unitary authorities that comprise the CCR.

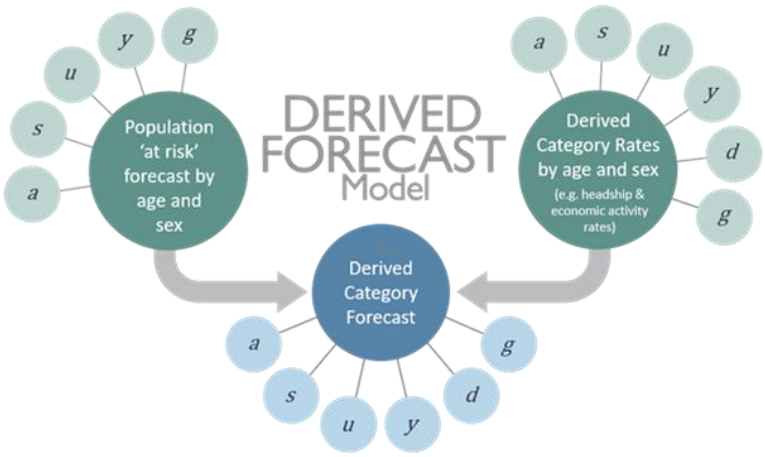
POPGROUP is a suite of demographic models used to derive forecasts of population, households, and labour force, for areas and social groups. The main POPGROUP model is a 'cohort component' model, which enables the development of population forecasts based on births, deaths and migration inputs and assumptions.

Figure 4.1 POPGROUP Population Projection Methodology



The Derived Forecast (DF) model sits alongside the population model providing a membership rate model for household and dwelling projections and an economic activity rate model for labour force and employment projections.

Figure 4.2 DF Projection Methodology



$$D_{a,s,u,y,d,g} = \frac{P_{a,s,u,y,g}\ R_{a,s,u,y,d,g}}{100}$$

D	Derived Category Forecast	y	Year
P	Population 'at risk' Forecast	d	Derived category
R	Derived Category Rates	g	Group (usually an area, but can be an ethnic group or social group)
a	Age-group		
s	Sex		
u	Sub-population		

Scenario Definition

The benchmark scenario is the **WG-2018** scenario, replicating the Welsh Government's 2018-based subnational principal population projections.

Using the latest MYE components of change data (to 2021/22), two 'alternative trend' scenarios have been developed, using different migration histories from which to calibrate future growth assumptions. These '**PG**' scenarios are based on a continuation of short-term (5-year) and long-term (19-year) migration histories. In both scenarios, the UPC adjustment is included within the historical international migration profile, as this is the component of change with which UPC is most likely associated.

Drawing on the jobs forecast produced by SQW, two 'employment-led' scenarios have been configured (**Baseline Job Growth** and **Higher Potential Job Growth**). In an employment-led scenario, the annual change in the level of employment is used to derive a labour force and population growth profile, using key assumptions relating to economic activity rates, unemployment and commuting. Internal (domestic) migration is used to balance between population and employment growth; if the resident population is insufficient in size and structure to support the defined employment growth, a higher level of net in-migration will result. Migration assumptions have been drawn from the 2001/02–2021/22 historical period, consistent with the PG-Long-Term scenario.

As POPGROUP uses a people-based measure of employment, to account for those individuals with more than one job, a 'double-jobbing' adjustment has been applied to the SQW jobs forecasts (3-5% across the CCR authorities). Under the **Baseline Job Growth** forecast,

employment growth averages 2,344 per year (equivalent to 2,439 jobs per year). Under the **Higher Potential Job Growth** scenario, employment growth averages 4,547 per year (4,727 jobs per year).

Table 4.1 Scenario Definitions

WG-2018	Replicates the WG 2018-based *principal* projection, using historical population evidence up to its 2018 base year.
PG Short-Term Trend	Uses a 2022 base year, with migration, fertility and mortality assumptions calibrated from a 5-year historical period (2017/18–2021/22). The historical UPC adjustment is included within the international migration component of the MYEs (2001/02–2020/21).
PG Long-Term Trend	Uses a 2022 base year, with migration assumptions calibrated from a 21-year historical period (2001/02–2021/22), and fertility and mortality from a 5-year historical period (2017/18–2021/22). The historical UPC adjustment is included within the international migration component of the MYEs (2001/02–2020/21).
Baseline Job Growth	In this employment-led scenario, population growth is driven by growth in the level of employment, derived from the SQW CCR 'Baseline' forecast, equivalent to an additional 2,439 jobs per year. Employment growth targets are applied from the 2022 MYE onwards. Migration, fertility and mortality assumptions are consistent with the PG Long-Term scenario.
Higher Potential Job Growth	In this employment-led scenario, population growth is driven by growth in the level of employment, derived from the SQW CCR 'Growth' forecast, equivalent to an additional 4,727 jobs per year. Employment growth targets are applied from the 2022 MYE onwards. Migration, fertility and mortality assumptions are consistent with the PG-Long-Term scenario.

Scenario Inputs & Assumptions

Population

In each the **PG** and **Job Growth** scenarios, the projection base year is the 2022 ONS MYE, disaggregated by single year of age and sex. From 2022 onwards, future population counts are estimated by single year of age and sex, using the defined assumptions on fertility, mortality, and migration as outlined below.

In the **WG-2018** scenario, the population base year (2018) and growth trajectory thereafter are drawn directly from the official principal subnational population projections for each of the 10 authorities.

Births & Fertility

In the **WG-2018** scenario, projected birth counts are applied from the 2018 base year to ensure consistency with the official projections.

In the **PG** and **Job Growth** scenarios, an area-specific and age-specific fertility rate (ASFR) schedule is derived from a 5-year history of historical births data (2017/18–2021/22). In combination with the 'population at risk' (i.e., all females between the age of 15–49), the ASFR assumptions provide the basis for the calculation of births in each year from 2022 onwards. Over the forecast period, the ASFR is adjusted to reflect the annual rate of change in the long-term fertility assumptions of the WG's 2018-based Principal projection.

Deaths & Mortality

In the **WG-2018** scenario, projected counts of deaths by 5-year age group and sex are applied from the 2018 base year to ensure consistency with the official projections.

In the **PG** and **Job Growth** scenarios, an area-specific and age-specific mortality rate (ASMR) schedule is derived from a 5-year history of historical deaths data by sex (2017/18–2021/22). In combination with the 'population at risk' (i.e., the total population), these ASMR assumptions provide the basis for the calculation of deaths in each year of the forecast period. Over the forecast period, the ASMR is adjusted to reflect the annual rate of change in the long-term mortality assumptions of the WG's 2018-based Principal projection.

Internal Migration

In the **WG-2018** scenario, projected counts of internal in- and out-migration by 5-year age-group and sex are applied from the 2018 base year to ensure consistency with the official projections.

Under the **PG** scenarios, an area and age-specific migration rate (ASMigR) schedule is derived from a defined number of years of historical internal migration data, which then determines the future number of internal in- and out-migrants for the remainder of the plan period. For the **PG Short-Term Trend** scenario, this is derived from five years of historical data (2017/18–2021/22) and for the **PG Long-Term Trend** scenario, this is derived from the full twenty-one years of historical data (2001/02–2021/22).

In the **Job Growth** scenarios, internal migration assumptions are consistent with the PG Long-Term Trend scenario.

International Migration

In the **WG-2018** scenario, projected counts of international in- and out-migration by 5-year age-group and sex are applied from the 2018 base year to ensure consistency with the official projections.

Under the **PG** scenarios, future counts of international in- and out-migration have been derived from a defined number of years of historical internal migration data. For the **PG Short-Term Trend** scenario, this is derived from five years of historical data (2017/18–2021/22) and for the **PG Long-Term Trend** scenario, this is derived from the full twenty-one years of historical data (2001/02–2021/22). An ASMigR schedule of rates is derived from the relevant migration history and used to distribute the future counts by single year of age.

In the **Job Growth** scenarios, international migration assumptions are consistent with the PG Long-Term Trend scenario.

Labour Force & Employment

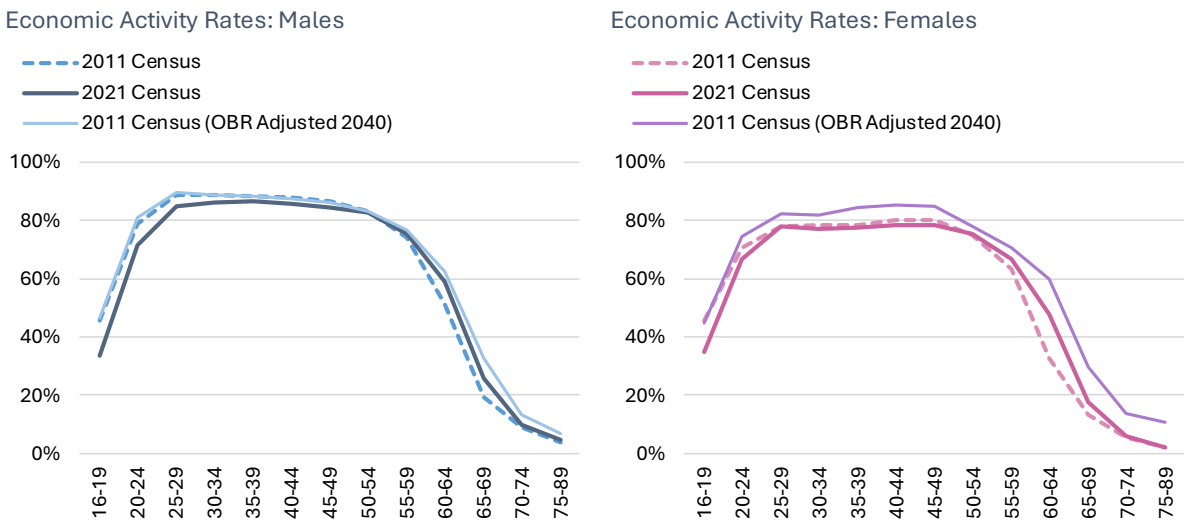
In all scenarios, economic activity rates, an unemployment rate and a commuting ratio determine the link between population and employment growth. In the trend and official (WG) scenarios, these assumptions are applied to the population growth trajectory to determine the size of the resident labour force and the level of employment in the area. In an employment-led scenario, these assumptions are used to determine the level of labour force and population growth required to support the defined level of employment.

Economic Activity Rates

Economic activity rates are the proportion of the population that is actively involved in the labour force, either employed or unemployed and looking for work. Economic activity rates by five-year age group (ages 16–89) and sex have been derived from Census statistics for each of the CCR authorities.

Between the 2011 Census and the 2021 Census, there has been a decrease in economic activity for males and females in all age groups under 55 years in the CCR. The reduction in the 16–19 age group across males and females is likely linked to a greater proportion of this age group staying in education/training beyond the age of 16. In the 55+ age groups for both males and females, economic activity rates increased between 2011 and 2021, particularly for women, due to people retiring later and women staying in the labour force for longer.

Figure 4.3 Economic Activity Rates



Source: ONS, OBR 2018

Whilst these changes are, to some extent, to be expected, it is important to note the impact that the COVID-19 pandemic had (and continues to have) on labour force participation rates. The Office for Budget Responsibility (OBR) has identified that during the pandemic, there was a

rise in economic inactivity, particularly amongst the student age groups.[136] This trend was also observed seen across the younger ages (i.e. not just students).[137] The November 2023 OBR report suggests that this suppression in the participation rates is likely to continue until 2026 due to long-term sickness and retirement within the older age groups, but that rates may increase to 2029.[138]

There is also evidence to suggest that the way that people responded to the Census questions around labour force participation may have been impacted by furlough, which was introduced in March 2020 and ended in September 2021. Evidence suggests there were inconsistencies between the number of people who identified as "Temporarily away from work" in Census 2021 and other administrative data sources.[139]

Due to the uncertainty around how representative the 2021 Census economic activity rates are of current participation levels, the 2011 Census rates have been applied in the modelling. To account for future changes to the state pension age, adjustments have been applied to the economic activity rates, in line with the detailed 2018-based forecast from the OBR, presented in its fiscal sustainability report.[140]

Within the latest OBR fiscal outlook analysis, there is no forecast of the economic activity rates by age; the latest such analysis to include this is from 2018.[141] In the 2018 report, the OBR published its long-term labour force forecasts, including estimated changes to age and sex-specific economic activity rates. These were informed by age and sex-specific population projections and historical economic activity rates, whilst also accounting for the rising state pension age and its impact upon the economic activity rates of older age groups. Adjustments have been applied to all age groups to take account of these forecast changes. The economic activity rates in 2040 with these adjustments applied are also illustrated in **Error! Reference source not found.**.

Unemployment & Commuting

The relationship between employed residents and the level of employment in POGROUP is determined by the commuting ratio. A commuting ratio greater than 1.00 indicates that the size of the resident workforce exceeds the level of employment available in the area, resulting in a net out-commute. A commuting ratio of less than 1.00 indicates that employment in the area exceeds the size of the labour force, resulting in a net in-commute.

Welsh Government has published its own analysis of commuting patterns from 2011 to 2022, using Annual Population Survey (APS) data from ONS.[142] From the statistics on the total number of working residents in the area (i.e., the resident workforce) and the total number of people working in the area (i.e., employment), a commuting ratio for each of the 10 authorities has been derived. These ratios are fixed throughout the forecast period. Aggregated across the CCR, this suggests an overall net out-commute, with a ratio of 1.04.

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[136] OBR July 2023 Fiscal risks and sustainability – July 2023
[137] IMF July 2023 The Recent Decline in United Kingdom Labor Force Participation: Causes and Potential Remedies
[138] OBR November 2023 Economic and fiscal outlook – November 2023
[139] ONS, July 2023 Labour market quality information for Census 2021.
[140] OBR July 2018 Fiscal sustainability report – July 2018
[141] OBR July 2018 Fiscal sustainability report – July 2018
[142] Commuting patterns by Welsh local authority and measure

The unemployment rate determines the proportion of unemployed people within the economically active population. Historical unemployment rates have been sourced from ONS model-based estimates (APS, 2023).

The commuting ratio and unemployment rate assumptions for each of the authorities are summarised below.

Table 4.1 Commuting Ratio and Unemployment Rate Assumptions

Area	Commuting Ratio	Unemployment Rate
Blaenau Gwent	1.46	3.9%
Bridgend	1.12	3.2%
Caerphilly	1.19	3.4%
Cardiff	0.82	4.0%
Merthyr Tydfil	1.04	3.9%
Monmouthshire	1.03	2.4%
Newport	0.94	4.3%
Rhondda Cynon Taf	1.36	3.4%
Torfaen	1.03	3.3%
Vale of Glamorgan	1.26	2.8%

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