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Migration and the Low-Carbon Economy in North Wales

Research for Cwmni Eginio



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1 / Introduction

Introduction

Purpose and Context

Useful Projects and Ynys Resources Ltd were commissioned by Cwmni Eginio to conduct research and compile evidence on the challenge of population change and migration in North Wales.

Cwmni Eginio was set up by the Welsh Government in 2021 to create sustainable jobs and promote economic and social regeneration by helping small-scale nuclear development across North Wales.

The objectives of the research were to:

1. Identify and summarise the multidimensional factors that underpin migration to and from North Wales with evidence from literature and the lived experience of people.
2. Understand how the low-carbon energy sector in North Wales, and other supporting organisations and stakeholders, could support more people to stay in, return to, or migrate to Wales.

North Wales, Nuclear Development and Migration

Cwmni Eginio has prepared a Prospectus for future investment in North Wales, making the case for bringing new nuclear to North Wales, and showcasing what the region has to offer.

The UK Government's target of 24GW of nuclear power will require 40,000 jobs by 2030. However, only around 1% of the UK nuclear workforce (827 people) live in Wales and Ynys Môn has seen a 57% drop in jobs linked to the nuclear industry.

There is therefore a significant gap in skills and employment in Wales that will need to be developed if Wales is to secure the local economic benefits of nuclear investment and the wider low carbon energy opportunities.

Population change in North Wales has contributed to this skills and employment gap: by decreasing the number of working age people who could work in the sector.

This research is therefore important for understanding the migration patterns of working age Welsh people and the multitude of factors that underpin them. It can inform future activity around the North Wales low-carbon energy sector in relation to skills and employment. In addition, it is important to understand the factors that attract people from outside North Wales to work in the area including the retention of students who came from outside Wales to study at Bangor University.

Migration and Brain Drain

Brain Drain

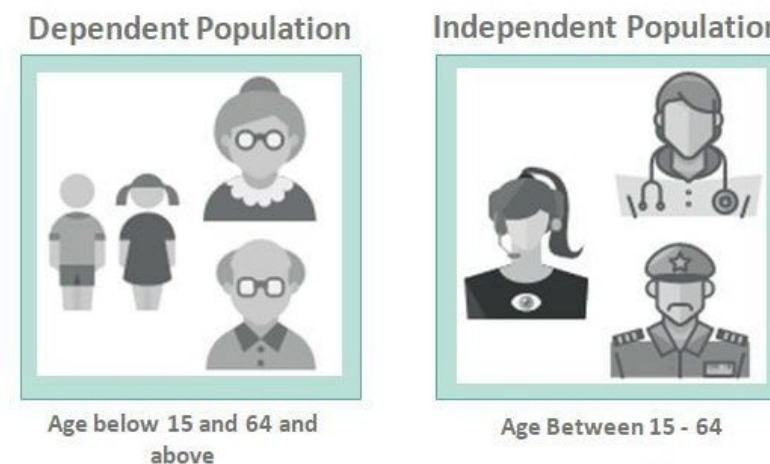
Much of the literature and policy has used the term ‘brain drain’ to describe the departure of a region’s highly skilled and educated people when they emigrate to another country or region.

The challenges associated with Brain Drain include:

- Loss of skilled workers
- Shrinking working age population and growing dependency ratio (ratio of children and over 65s to working age)
- Smaller tax base, increasing pressure on public services
- Challenge to take advantage of future industry such as green energy and technology

The Economy Minister of Wales has made tackling long-term demographic change an [official aim](#) of his approach by focusing on retaining young people. He said they want to create an economy where:

“young people feel confident about planning their future in Wales thus supporting job creation and more dynamic local economies.”



Migration

In this research, we use the term ‘migration’ which more broadly and accurately describes how the population changes in North Wales. In addition to skilled workforce leaving North Wales, people also stay, return and migrate to the area which is not captured by the term ‘brain drain’.

Migration happens for many reasons, often described as ‘push’ and ‘pull’ factors:

- **Push factors** = factor that motivated people to leave their home country or region.
- **Pull factors** = factors that attract people to a place.

Methods

There have already been several studies conducted on the topics of Welsh brain drain and migration, particularly with a focus on young peoples' migration between Wales and England.

The research methods have been designed to understand the findings from existing literature and apply them to the context of North Wales (specifically Gwynedd and Anglesey) and the low-carbon energy sector. The following methods were used:

1. Literature Review

A review of existing news articles, academic journal articles, studies and surveys from the last decade was conducted to understand the trends, push and pull factors, and policy responses.

2. Quantitative Data Analysis

Analysis of publicly available datasets from Stats Wales to identify migration patterns for different groups in Gwynedd and Anglesey. To localise existing Wales-level datasets to the North Wales context.

3. Semi Structured Interviews

Conducted four semi structured interviews with support services, (M-Sparc, Coleg Llandrillo Menai, Arfor and Bangor University). One interview with a recruitment website provider and one interview with a social housing provider. Interviewees were asked about the support services they provide as well as challenges and opportunities with migration.

10 semi-structured interviews with individuals were conducted. For efficiency this was done with 9 of the individuals who represented the support services and an additional 5 individuals. This included locals who stayed in the region, locals who returned to the region after going to university or employment elsewhere individuals who studied at Bangor University and stayed in the region and individuals who came with a partner who had links to the area.

4. Additional Qualitative Data gathering

- A focus group was held at M-Sparc.
- Observations were made during meetings with Ambition North Wales, Institute of Welsh Affairs and an Innovate UK Local meeting.

Appendix A includes a summary of the references to literature and datasets, and who was interviewed.

2 / Overview of population change in North Wales

What does population change look like in North Wales?

Population change by local authority

Figure 1 displays population change by local authority from 2011 to 2021:

- The greatest population decline occurred in Northwest Wales. This is contrasted to Southeast, and Northeast Wales which experienced the greatest population growth.
- Gwynedd and the Isle of Anglesey were 1 of 7 local authorities that experienced a decline in population from 2011 – 2021.
- Gwynedd experienced a greater decrease in population relative to Anglesey, but Ceredigion had the highest.

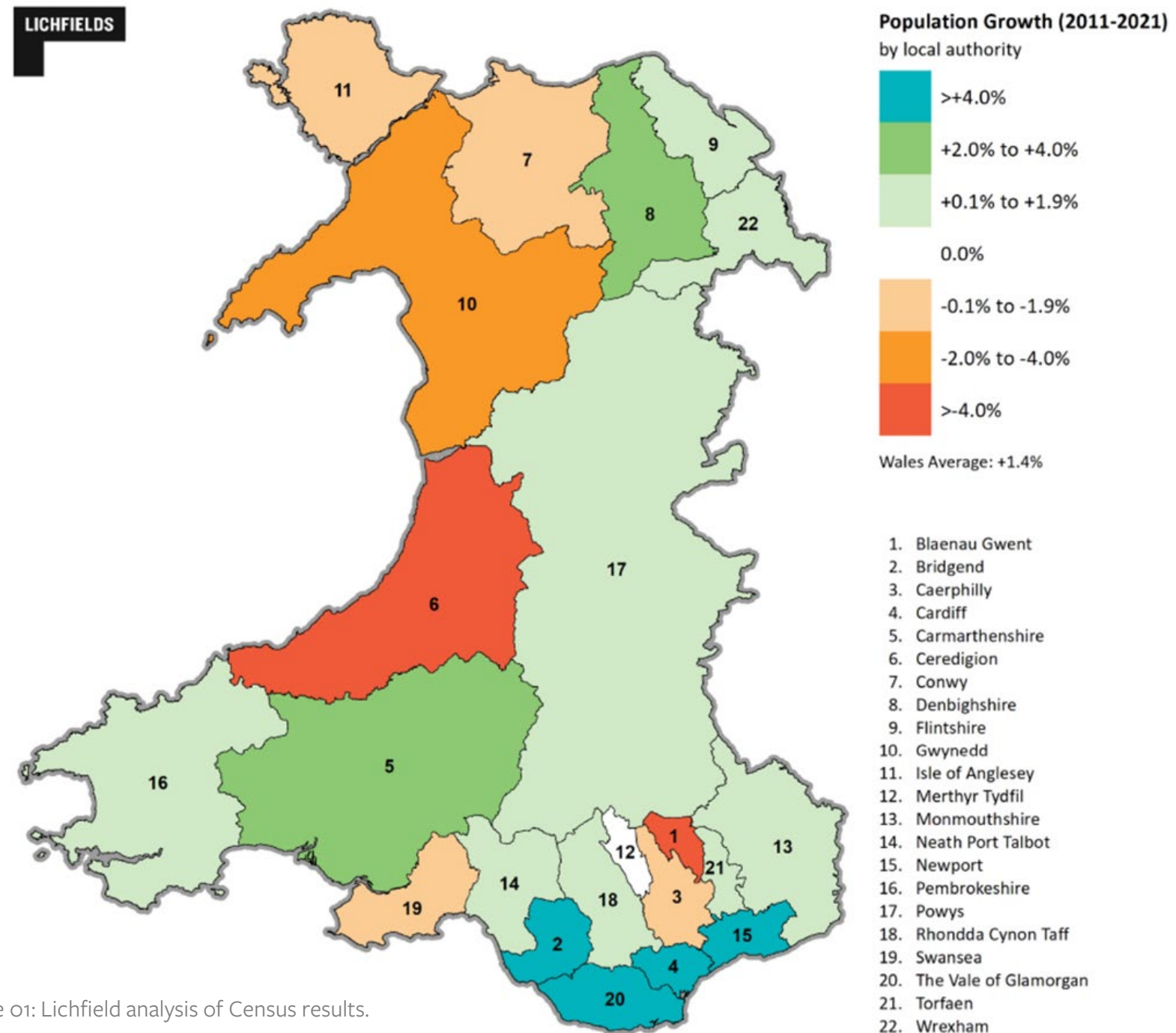


Figure 01: Lichfield analysis of Census results.

What does population change look like in North Wales?

Declining working age population, increasing dependency ratio

Overall, Wales is experiencing an ageing population and declining working age population.

- In Wales, the percentage of working age people (aged 16 to 64) is projected to fall from 61.3% in 2018 to 57.9% in 2043 (Figure 02).
- Gwynedd's current working age population is similar to the Welsh average.
- The proportion of people aged 16 to 64 in Anglesey was already low in 2018 at 57.1% and is projected to fall further to 52% in 2043.
- Wales has a higher and more rapidly increasing old-age dependency ratio compared to England, growing by 6.1 from 2011 to 2021 (Figure 03)

Old age dependency ratio (number of +65 for every 100-working people)		
Census	England	Wales
2011	27.4	31.6
2021	31.5	37.7
Change 2011 - 2021	4.1	6.1

Figure 03: Lichfield analysis of Census results.

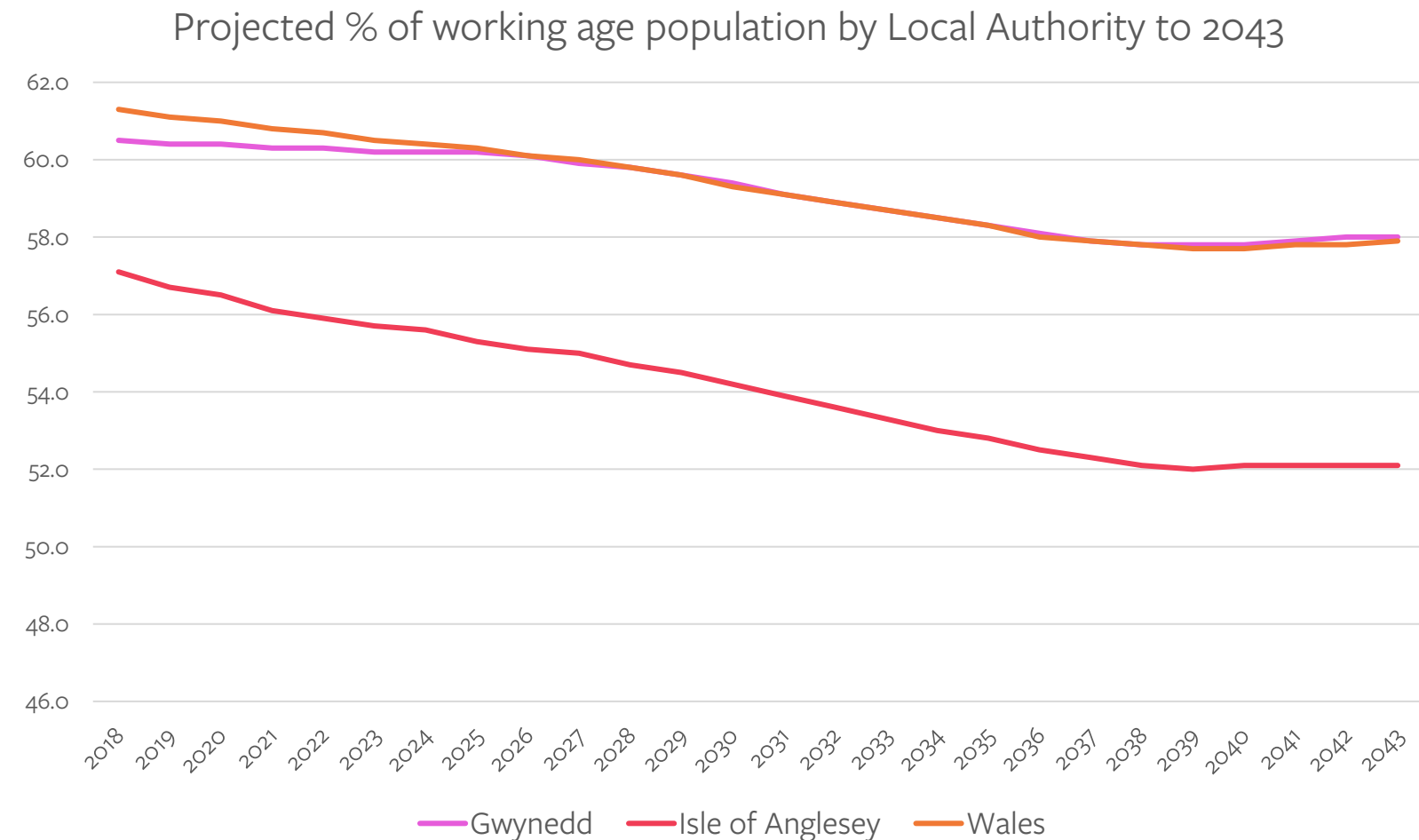


Figure 02: Local authority ageing statistics, population projections for older people, Stats Wales

What does population change look like in North Wales?

Occupational change in the North Wales workforce from 2021 to 2022, Ball

Figure 04 shows the number of employees in each occupational group in 2021 and 2022, or the composition of employment in Anglesey, Gwynedd, Conwy, Denbighshire, Flint, and Wrexham.

- The number of professional-level jobs in the region rose by a net of 2,600. Health professionals had the highest increase.
- The workforce of employees below professional levels shrank by a net of 4,000, with most standard occupational groups seeing decreases.
- Elementary occupations, transport and mobile machine drivers and care workers all saw increases, along with well-paid skilled jobs in trades.

Standard Occupational Group (SOC 2020)	Number of employees in 2022	Percentage of workforce in 2022	Year-on-year change from 2021
11: corporate managers and directors	15000	4.6	-100
12: other managers and proprietors	13900	4.3	-2,800
21: science, research, engineering and technology profs	12500	3.9	-200
22: health professionals	20500	6.3	3,000
23: teaching and educational professionals	16100	5	1,000
24: business, media and public service professionals	16700	5.1	-1,700
31: science, engineering and technology associate profs	6800	2.1	300
32: health & social care assoc. professionals	8500	2.6	100
33: protective service occupations	7500	2.3	2,300
34: culture, media and sports occupations	5700	1.8	-200
35: business & public service assoc. professionals	16200	5	900
41: administrative occupations	21200	6.5	-1,600
42: secretarial and related occupations	6300	1.9	1,300
51: skilled agricultural and related trades	7700	2.4	400
52: skilled metal, electrical and electronic trades	14400	4.4	1,500
53: skilled construction and building trades	11400	3.5	-500
54: textiles, printing and other skilled trades	6500	2	-1,100
61: caring personal service occupations	27600	8.5	1,500
62: leisure, travel and related personal service occupations	7200	2.2	-1,700
71: sales occupations	14100	4.4	-2,700
72: customer service occupations	4600	1.4	-1,800
81: process, plant and machines operatives	10800	3.3	-1,200
82: transport & mobile machine drivers/operatives	15300	4.7	2,900
91: elementary trades and related occupations	6300	1.9	700
92: elementary administration & service occupations	30200	9.3	6,300

Figure 04: Occupational change in the workforce in Anglesey, Gwynedd, Conwy, Denbighshire, Flint, and Wrexham

What does population change look like Wales?

Internal (UK) and international migration

Both internal and international migration has risen rapidly in the last decade. Internal migration refers to migration between local authorities within England and Wales.

Internal (UK) Migration

- Net internal migration is around 2.5 times higher than the average over the previous two decades.
- Net internal migration to Wales (from other UK nations) was around 17,600 in mid-2023, higher than in mid-2022 when net internal migration was 10,700.

International Migration

- From 2011 to 2021, average yearly net international migration was around 5,200.
- In recent years, net international migration is around four times higher than the average over the previous two decades.
- It is estimated that net international migration to Wales was around 23,600 in mid-2023, which is similar to the number of international migrants in mid-2022.

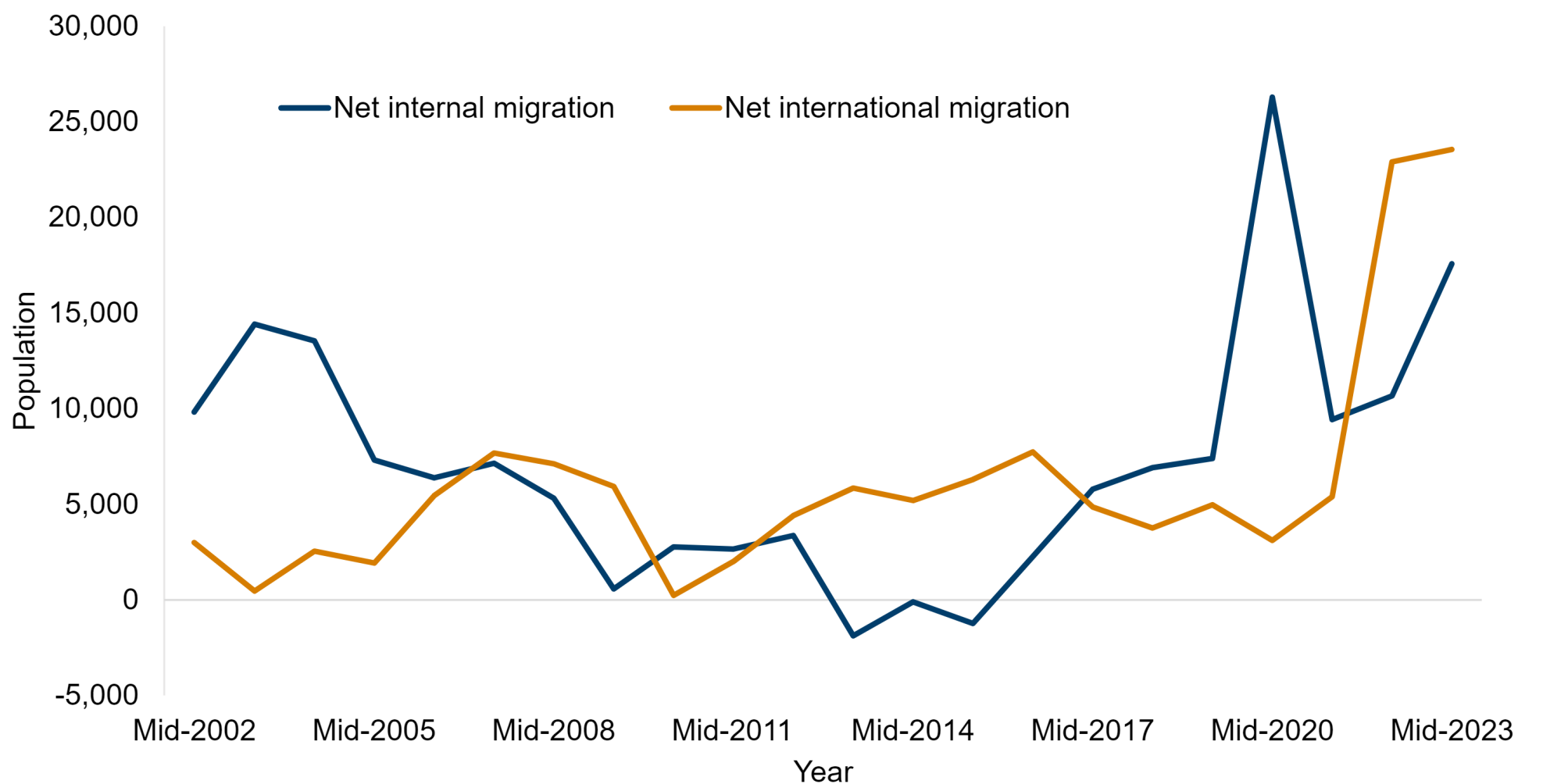


Figure 05: Net Internal and international migration in Wales, mid 2002 to mid 2023, Stats Wales

Where are they going?

Internal (UK) migrants

In 2021/2022, 129,379 people living in Wales moved within Wales or the UK:

- 51% of this group moved to England, 3% moved to Scotland or Northern Ireland, and 41% moved elsewhere in Wales.
- 2% of internal migrants from Wales were from the Isle of Anglesey, and 5% were from Gwynedd.
 - Most people moving from the Isle of Anglesey, Gwynedd and Wales were going to England.
 - More people from Gwynedd and Anglesey moved to England compared to the Welsh average.
- For those that did move within Wales, migrants from the Isle of Anglesey and Gwynedd were not moving far: they primarily moved between each other or Conwy.
 - Cardiff was the destination for 9% of their movers.

Proportion of intra-UK migrants from the Isle of Anglesey, Gwynedd and Wales overall by destination country 2021/2022

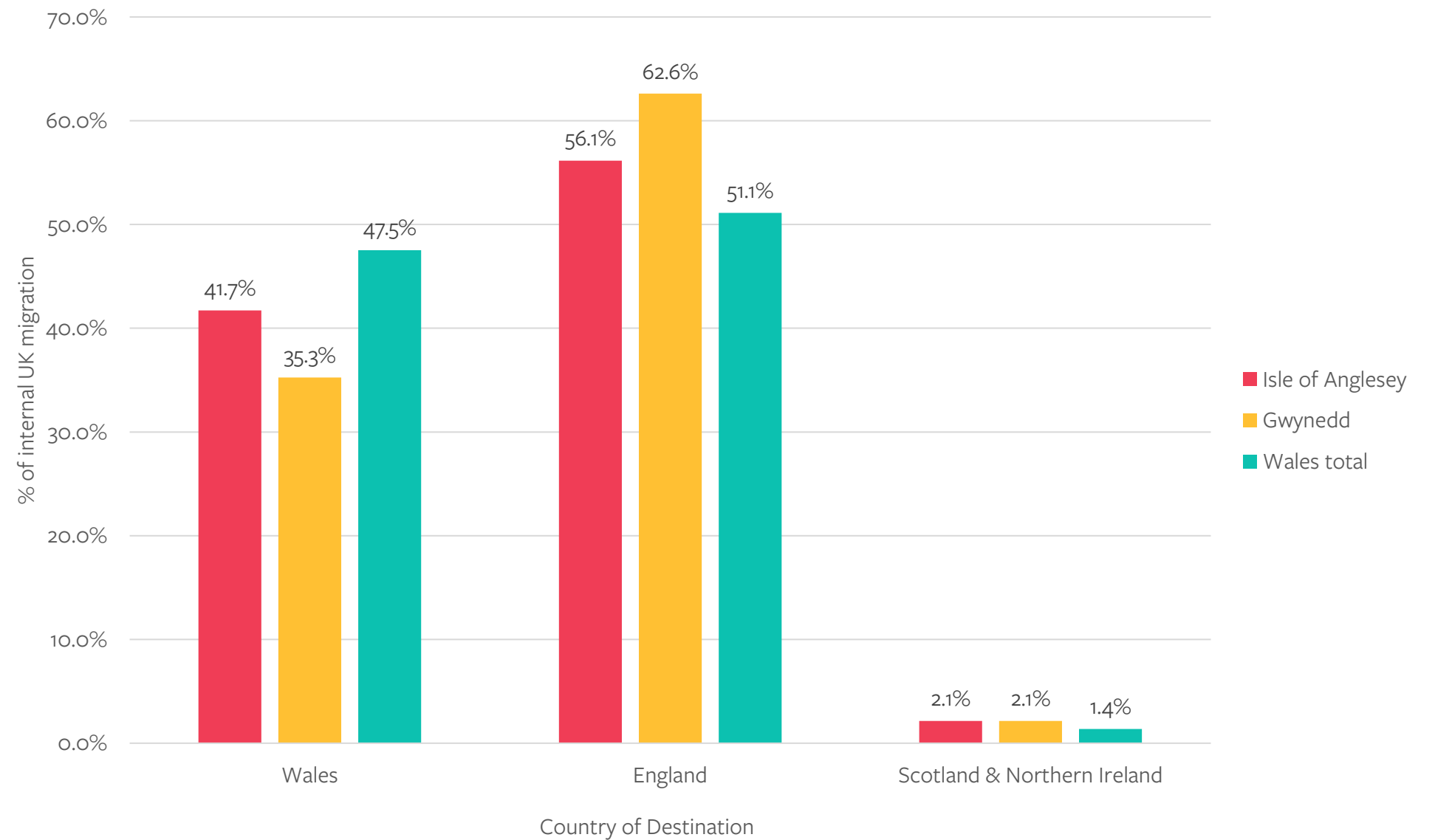


Figure o6: Migration flows in Wales and with UK countries, by origin and destination , Internal migration statistics, Office for National Statistics

Who is moving? Age of internal migrants

There are three key life stages which are significant for internal migration:

1. Entering Higher and further Education (HEFE): ages ~15 – 24
2. Entering the workforce: ages ~25 – 29
3. Settling down: ages ~30 – 39, 50 – 69

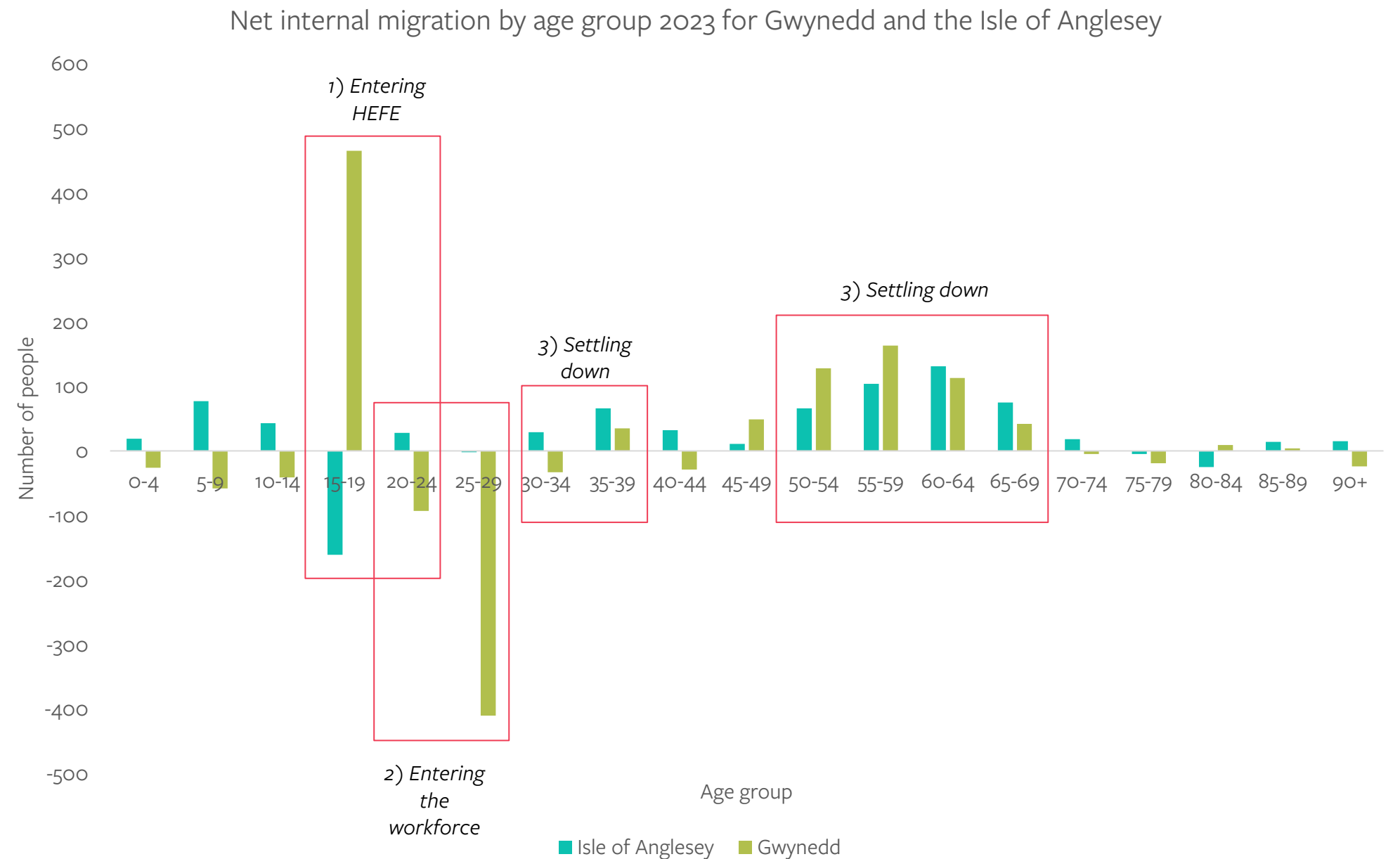


Figure 07: Net internal migration by age group in 2023, Office for National Statistics

Who is moving?

Life stages

Entering Higher and Further Education (HEFE)

- Gwynedd had a significant net inflow compared to the Isle of Anglesey (likely due to Bangor University).

Entering the Workforce

- Gwynedd had a significant net outflow of internal migrants (likely leaving Bangor university and moving to other cities).
- More people (approximately 50) left Gwynedd from ages 20-29, meaning not only those who lived there temporarily for university left, but also locals.

Settling Down

- The Isle of Anglesey had only net inflows of internal migrants from ages 30 – 74.
- There are inflows of migrants to both local authorities in this group (particularly among those aged 55 - 64)
- Gwynedd experience more net inflows of internal migrants from 50-59, and the Isle of Anglesey had greater inflows of migrants from ages 60-69.

Net internal migration by age group 2023 for Gwynedd and the Isle of Anglesey

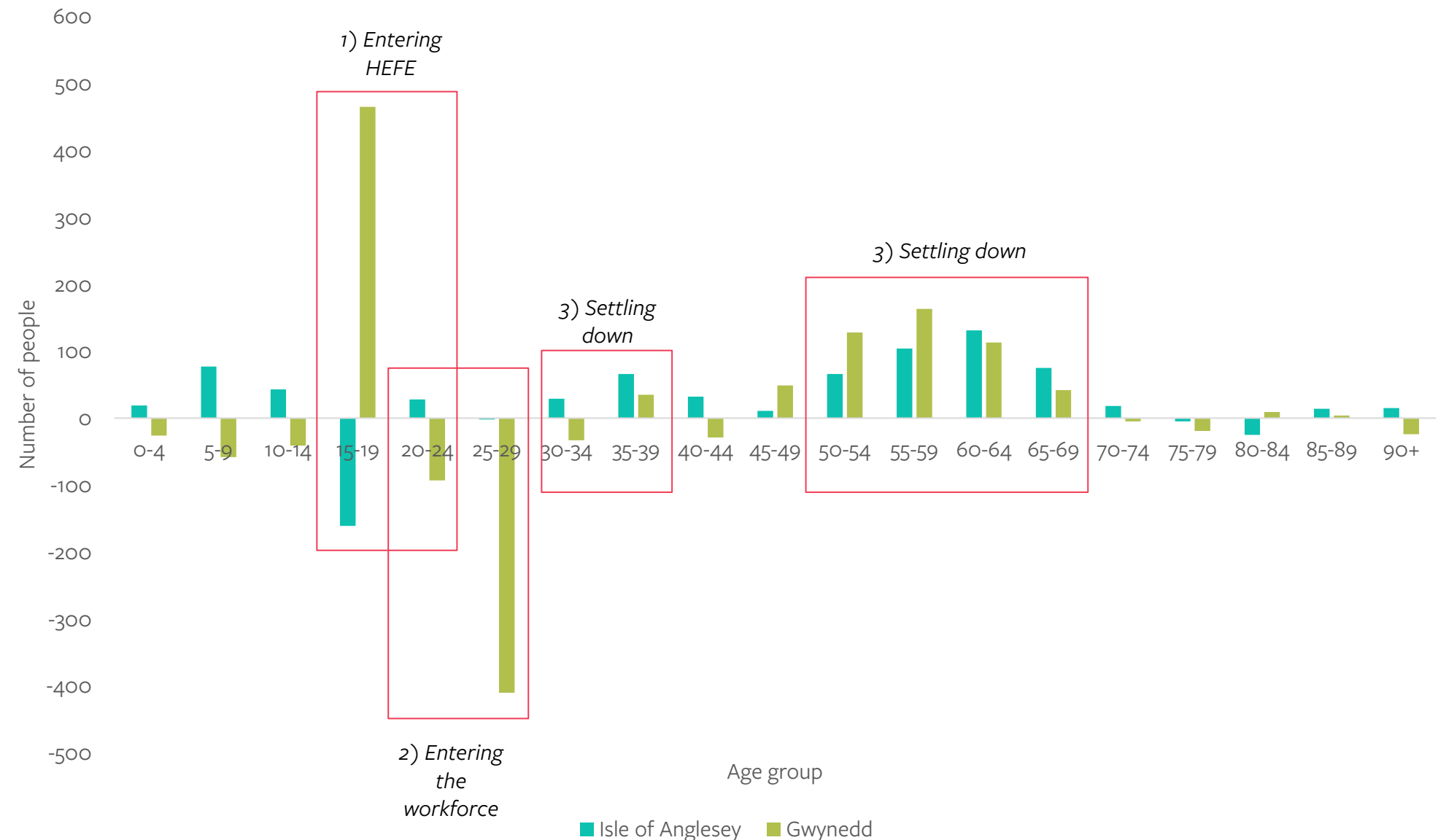


Figure 07: Net internal migration by age group in 2023, Office for National Statistics

Who is moving?

Typologies of Welsh migrants

Three groups have been classified in literature to understand different motivations for the migration of Welsh people across life stages: leavers, stayers, and returnees. This was further supported by the interviews.

The following pages use these typologies alongside the key life stages to present findings from the literature review and interviews.

While there is generally population decline, there is also in-migration by non-Welsh natives, which presents an opportunity for increasing the working age population and attracting skilled people into North Wales. This is explored in section 4.

Leavers

- Most leave from 15–29 years old
- Tend to be motivated by economic considerations and sense of belonging

Returners

- Highest number of returners during periods of ‘settling down’ (30–35, 50–69)
- Tend to consider family and settling down more than leavers

Stayers

- Most consideration in research goes to leavers or returnees – stayers are often portrayed as left behind
- The decision to stay happens multiple times across one’s life, not just once
- Highest proportion of Welsh speakers

3 / Key findings: Welsh migration

3.1 / Higher and further education

- *Leavers*
- *Stayers*

Leavers and stayers

Leavers

- Driven more so by economic considerations than returnees but this is not the only factor, also:
 - Career path,
 - Household structure,
 - Household status,
 - Life stages – young adulthood, family formation, retirement, and
 - Sense of belonging (language, culture, identity).

The motivations of out-migration are intersectional and complex, focusing on a few factors is insufficient.

Stayers

- Most research is on leavers or returners – stayers are often portrayed as ‘left behind’.
- The decision to stay happens multiple times across one’s life, not just once.
- This group has the highest proportion of Welsh speakers.

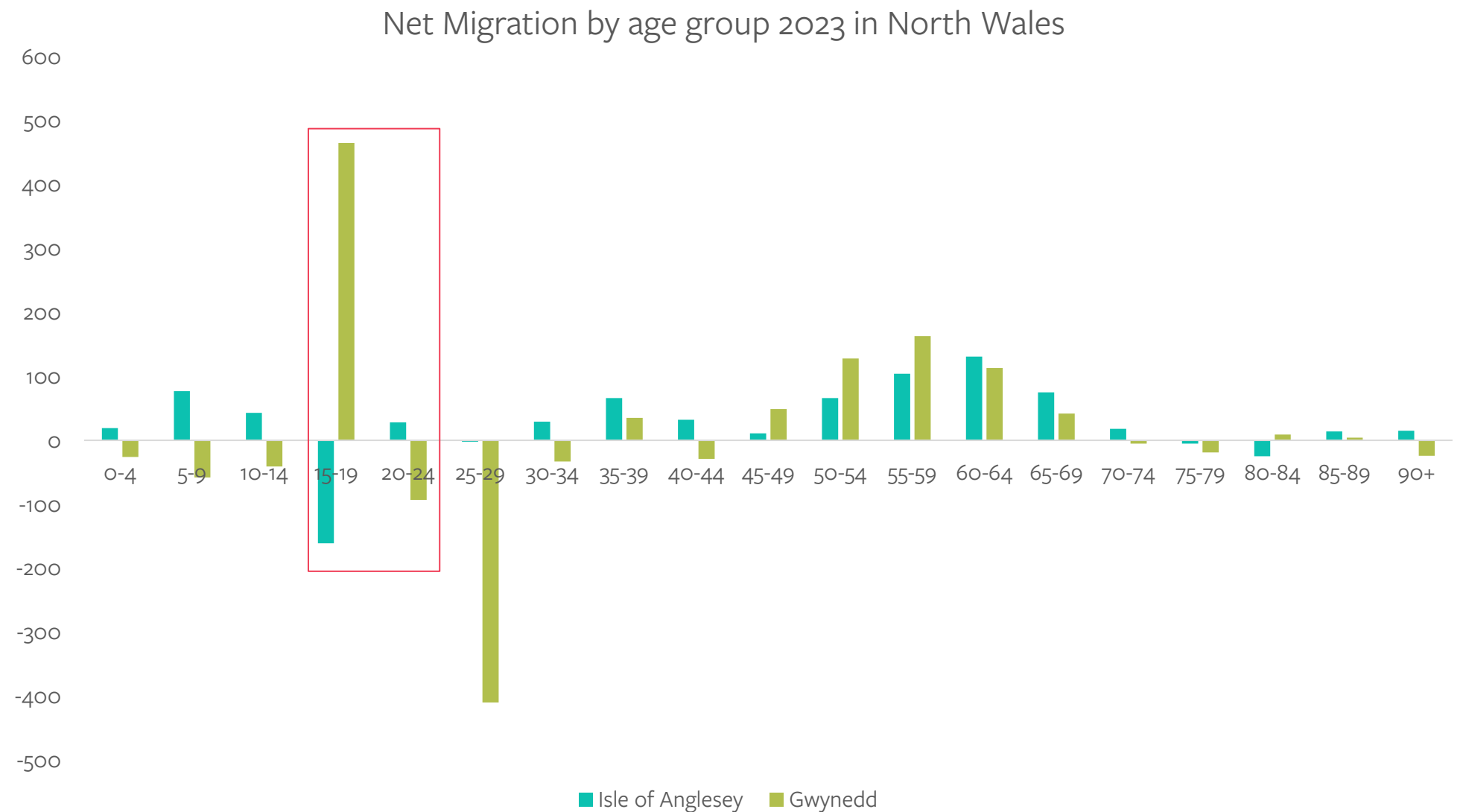


Figure 07: Net internal migration by age group in 2023, Office for National Statistics

Lived experience – Sarah Schofield

Leaver at 16 - Sarah's Journey Back to North Wales

Director of Customers and Communities Adra

Sarah has been working at Adra for the past eight years. Though she spent 14 years of her childhood living on Ynys Mon/Anglesey and attended primary and secondary school there, she moved to North-West England at 16. Sarah studied Environmental Health at Manchester Metropolitan University and went on to work for several local authorities in the North-West, including Tameside, Burnley and Bolton. A summer visit home to see family brought her back to the area, she was struck by the region's natural beauty, outdoor activities, and the sense of safety. She decided to move to back.

Despite being highly qualified, Sarah initially struggled to find work due to the requirement for fluent Welsh in her field. The lack of connections between networks in north Wales and her previous workplaces were also a challenge. To address the language barrier, Sarah took the advice to hire a tutor. While she had been a fluent Welsh speaker at school, she had forgotten nearly all the Welsh vocabulary. Mastering workplace-specific vocabulary and technical terms required significant effort. She recognises the challenges this posed, particularly for newcomers who had never learned a second language. While general-purpose Welsh courses and school immersion programs are readily available, Sarah felt there was a gap in workplace-focused Welsh language training, particularly for those needing to learn quickly.

Supporting Skills Development: Adra's Role

One of the key initiatives Sarah is proud of at Adra is its Academi Adra, an employment and skills scheme designed to help individuals gain the qualifications and experience needed to secure employment. The scheme covers a wide range of areas, including construction, ground maintenance, supported housing and customer service. Housing Associations also provide lots of training, apprenticeships, work placements, and graduate opportunities. Demand for Academi Adra is extremely high—Sarah noted that places are filled quickly as soon as they're advertised.

New developments in the area could further support this work by providing valuable placements and potentially financial support to expand opportunities. However, Sarah also pointed out a key concern for employers: the growing demand for construction workers, engineers, and surveyors. As demand rises, there's a risk of losing existing staff to other projects, which could create challenges for local employers. This is an issue that will require careful management to ensure that opportunities for growth don't inadvertently destabilise the workforce.

Reflections on Work and Life in North Wales

Sarah acknowledges that wages in North Wales are typically lower than in England; for instance, CEOs of local authorities in England earn more.



However, she feels the work-life balance in North Wales is far superior. The region's quality of life, sense of safety, and good employers provide a very desirable place to live and work. Housing remains a significant issue, though. The introduction of the Welsh Renting Homes Act has made the responsibilities of landlords more onerous, leading many to exit the rental market. Social housing is also under significant pressure, with thousands on the waiting lists. Housing Associations in North Wales are developing new homes and investing millions in existing properties. This provides a lot of employment opportunities for staff and contractors.

Sarah's Vision

Sarah envisions North Wales as a region where the unique challenges of language, housing, and workforce demands are addressed to build a sustainable future. She sees Adra as playing a key role in supporting individuals and communities, not just through housing but by providing opportunities for skills development and career progression. Her personal journey highlights the importance of creating inclusive pathways for professionals and ensuring that the area remains attractive for both returning and existing residents.

Why are they leaving? Push factors

Survey of 14–25-year-olds in rural Wales, 2021

A 2021 survey of 14–25-year-olds in rural Wales, with 1056 responses revealed that:

- While 75% enjoy living in rural Wales, 40% expect to live outside of Wales in 5 years' time.
- 22% agree that employment opportunities in their local area are good.
- 59% are concerned about being able to afford to buy a house in their local area.
- 26% agree that the public services in their local area meet their needs.
- 27% agree that the social and cultural opportunities in their local area are good.
- 81% think that they will need to move away from their local area for education, training or work.
- 18% anticipate that they will continue living in their local area over the next five years; 42% expect to move outside Wales in this period. (Figure 08)
- First language Welsh speakers are more positive than others and are more likely to return if they move away.
- Young women tend to be more dissatisfied than young men.

In the next five years do you think that you will...

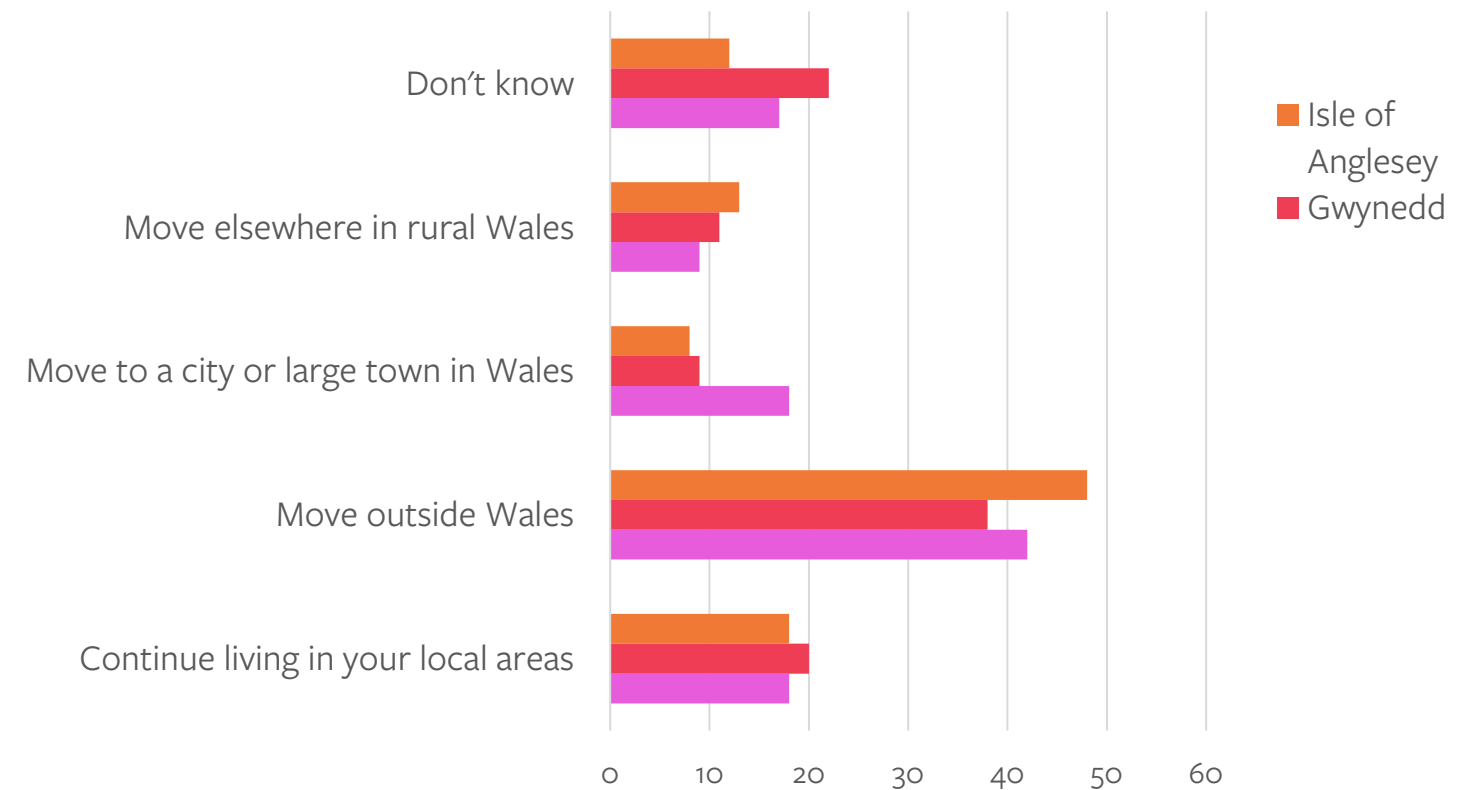


Figure 08: Survey results of 14–25-year-olds in rural Wales, 2021.

Case Study – Coleg Llandrillo Menai

FE College Skills Enabler – Developing pathways

Coleg Llandrillo Menai (CLM) provides a range of skills development tools, including apprenticeships and work-based learning opportunities. These initiatives are funded through both Welsh Government and commercial sources. CLM is seeking to refine and consolidate its offerings by focusing on a family of key sectors, such as Power Utilities and Infrastructure. In addition to core technical and academic skills, enabling skills—such as procurement, project management, and accountancy—are increasingly essential. A critical component of this approach is the development of close relationships between CLM and employers, working collaboratively to identify investment priorities and design growth programmes. This “hand-in-glove” approach will allow tailored pathways to be created, addressing specific priorities and fostering career development.

These pathways will be developed through partnerships with employers, schools, and support organisations such as Business Wales. A successful example of this model is CLM’s 10-year partnership with Babcocks, which includes initiatives like in-school CV writing workshops and degree apprenticeship opportunities. Importantly, these pathways are relevant not only to new entrants but also to existing employees seeking to enhance their skills. This tailored approach aims to “*shine a light*” on regional economic priorities and illustrate how CLM can help individuals progress on their career pathways.

Transferable Skills and Sector Preparedness

One of the key challenges for CLM is preparing the labour market for opportunities in the nuclear sector without raising unrealistic expectations. This is best achieved by focusing on what is already happening within the economy and building foundational skills that can be applied across sectors. Low-carbon developments in North Wales—including nuclear, tidal, wind, and hydropower—require a broad base of foundational skills. Specialist skills can then be developed to meet the unique demands of each sector. To achieve this, collaboration with developers is essential to identify timelines for investment programmes and determine the skills needed at each stage. This proactive approach ensures that skills training aligns with employer requirements. By developing frameworks and new curricula tailored to emerging growth areas in the economy, CLM can prevent delays and ensure the workforce is prepared for upcoming opportunities.

Collaboration and Coherence

Effective collaboration between local authorities, Welsh Government, and support organizations like Business Wales is essential to maximize benefits. A coherent strategy is needed to ensure that skills training aligns with employer needs and is delivered at the right time and place. By fostering strong partnerships and aligning efforts across stakeholders, CLM can position itself as a key driver of economic growth in the region.



Leveraging Procurement and Local SMEs

Land-use planning provides an additional opportunity to support local economic development. For instance, procurement policies could specify local content requirements, but these need to be matched with the capacity of local SMEs. This can be achieved through targeted upskilling and reskilling programmes. Initiatives like “Fit for Nuclear” demonstrate how capacity can be built to meet the needs of major projects. Understanding project development stages is crucial to this approach. Many large projects are staggered, allowing capacity to develop incrementally as the project unfolds. This enables local SMEs to build their capabilities in line with demand and reduces the risk of skills shortages.

What would make young people stay? Pull factors

Survey of 14–25-year-olds in rural Wales, 2021

Participants in the 2021 survey were asked what changes would make them more likely to stay. The answers show there is not one ‘silver bullet’.

- More jobs appropriate to career aspirations was the most cited factor. Transport, housing affordability, and entertainment and leisure were also high in responses. (Figure 09)
- However, Figure 10 shows that there is a mismatch between the government’s strategic sectors and areas of interest for rural Welsh young people. Whereas creative industries and healthcare are of greatest interest, strategic sectors such as biotechnology and green technology / renewable energy as of less interest by comparison.

What would make it more likely that you would stay in your local area?

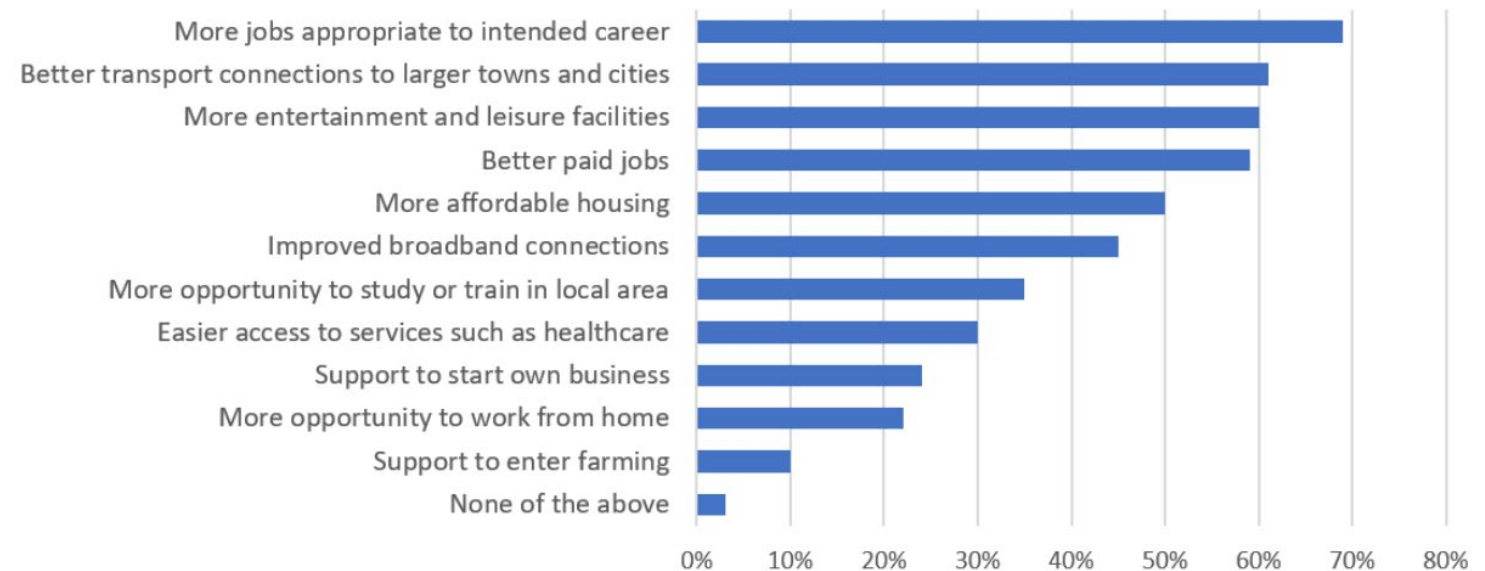


Figure 09: What would make survey respondents

Are you interested in working in any of the following areas?

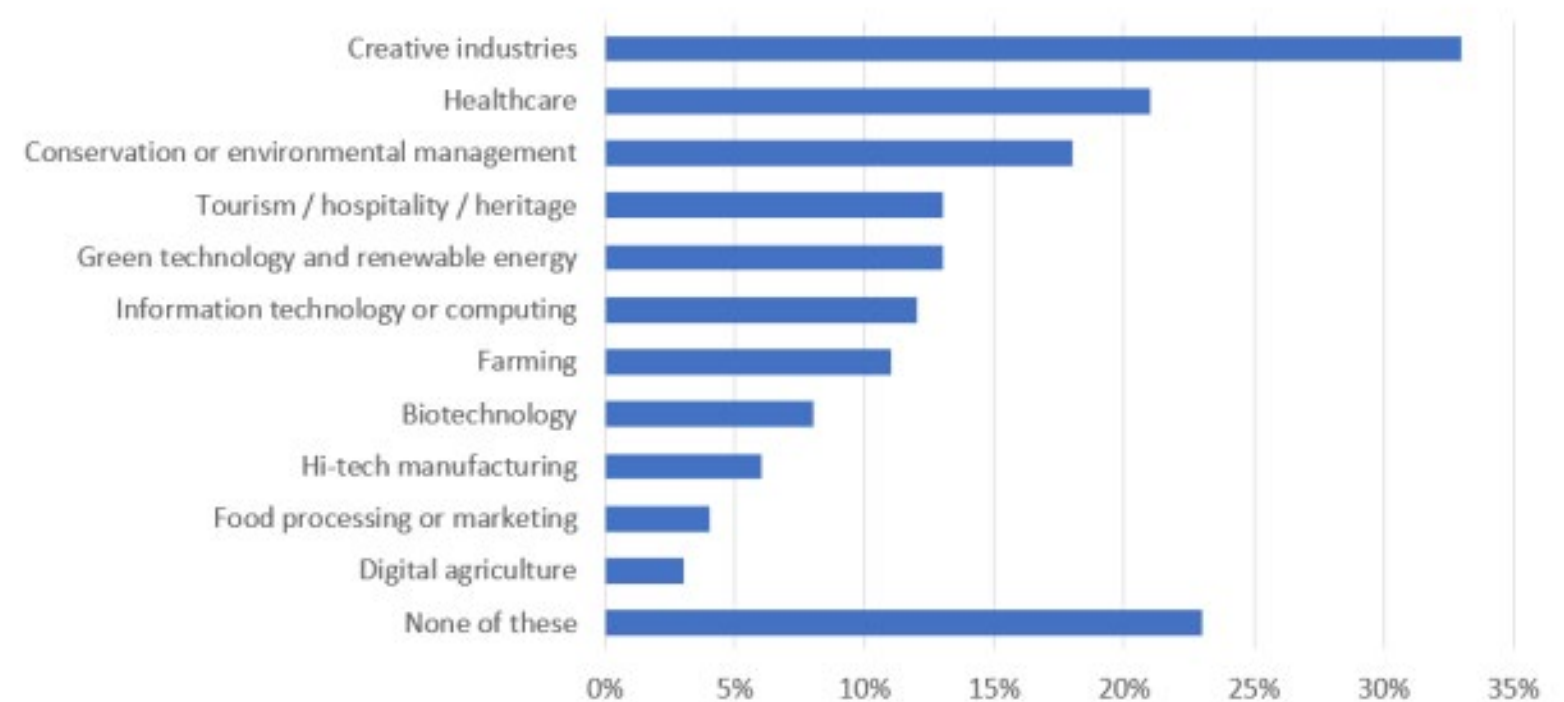


Figure 10: Interest of survey respondents in working in selected sectors, Survey of 14–25-year-olds in rural Wales, 2021 .

Who is leaving and staying? Typologies

Survey of 14–25-year-olds in rural Wales, 2021ies

The Wales Institute for Social and Economic Research and Data divided the results by typology of young people living in rural areas to better understand their characteristics, motivation and interventions (Figure 11).

- **Intending leavers (50%)** – mostly HEFE students and 2nd language Welsh speakers. 1/3 want to leave permanently, 1/3 intend to come back and 1/3 were prepared to come back.
- **Potential stayers / reluctant leavers (41%)** – overrepresented by first language Welsh speakers, important group to target for policy interventions.
- **Likely stayers (6%)** – disproportionately young men who are 2x more likely to be in work over education.

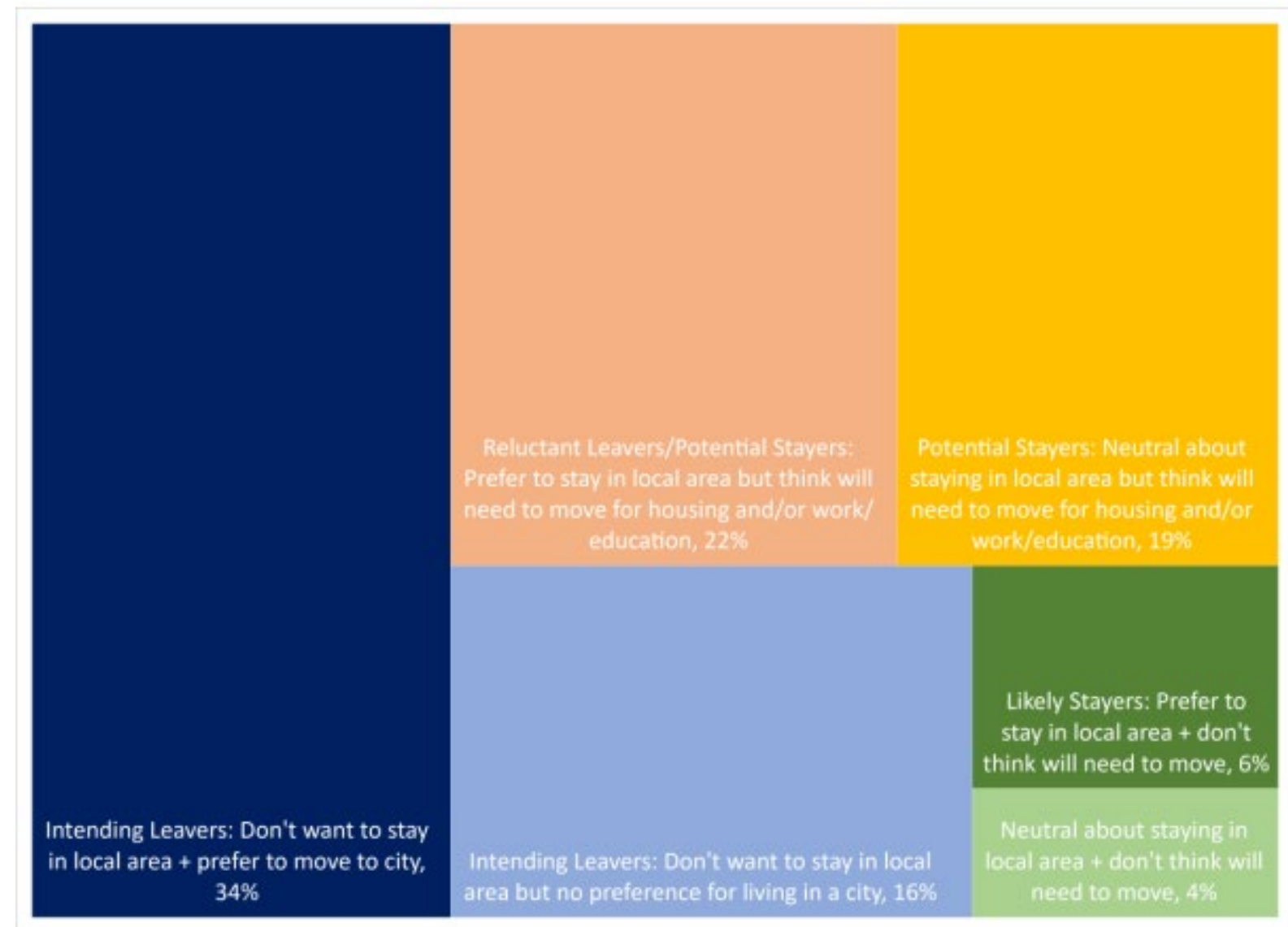


Figure 11: Model of potential mobility of young people in rural Wales as percentage of survey respondents.

3.2/ Entering the workforce

- *Leavers*
- *Stayers*
- *Returners*

Leavers and stayers

- This life stage is particularly important for out-migration and has traditionally been the focus of brain drain-related research.
- Gwynedd had a significant net outflow of internal migrants (likely leaving Bangor university after graduation and entering the workforce).
- More people left Gwynedd from ages 20-29 than entered at HEFE age – this means that locals also left after university.
- The Isle of Anglesey had almost no net migration either into or out of the local authority – this indicates after ages 15-19, people have generally stayed where they are until the ‘settling down’ life stages.

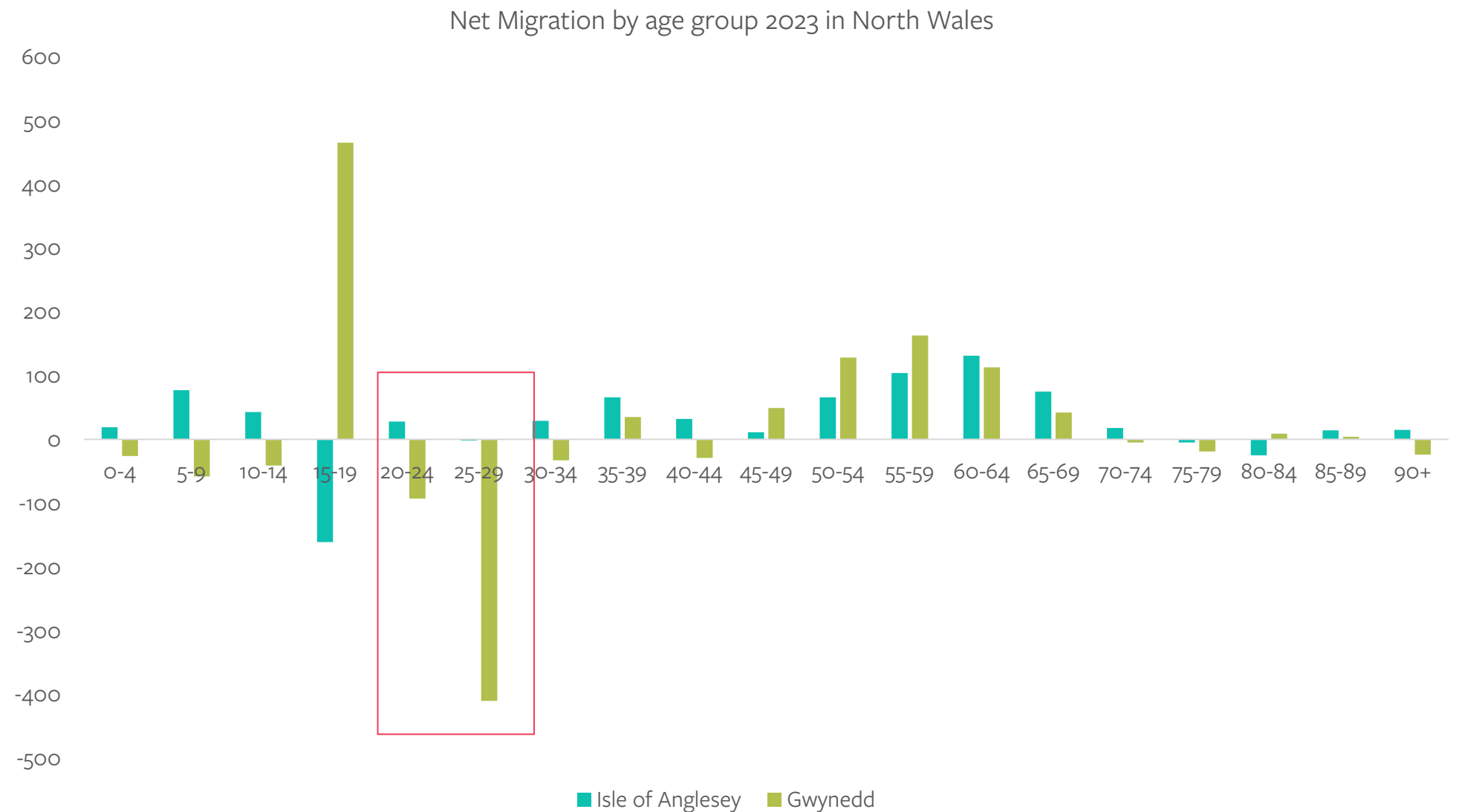


Figure 07: Net internal migration by age group in 2023, Office for National Statistics

Recent graduates

Where do they go?

Figure 12 shows where recent UK graduates go when they enter the workforce.

- 64.2% of Welsh domiciled graduates studied in Wales from 2017-2022.
- 88.7% of Welsh domiciled graduates who studied in Wales worked in Wales.
- 11% of Welsh domiciled graduates who studied in Wales worked in England.

Figure 15 - UK domiciled graduates entering work in the UK by region of domicile, region of provider and region of work

2021/22

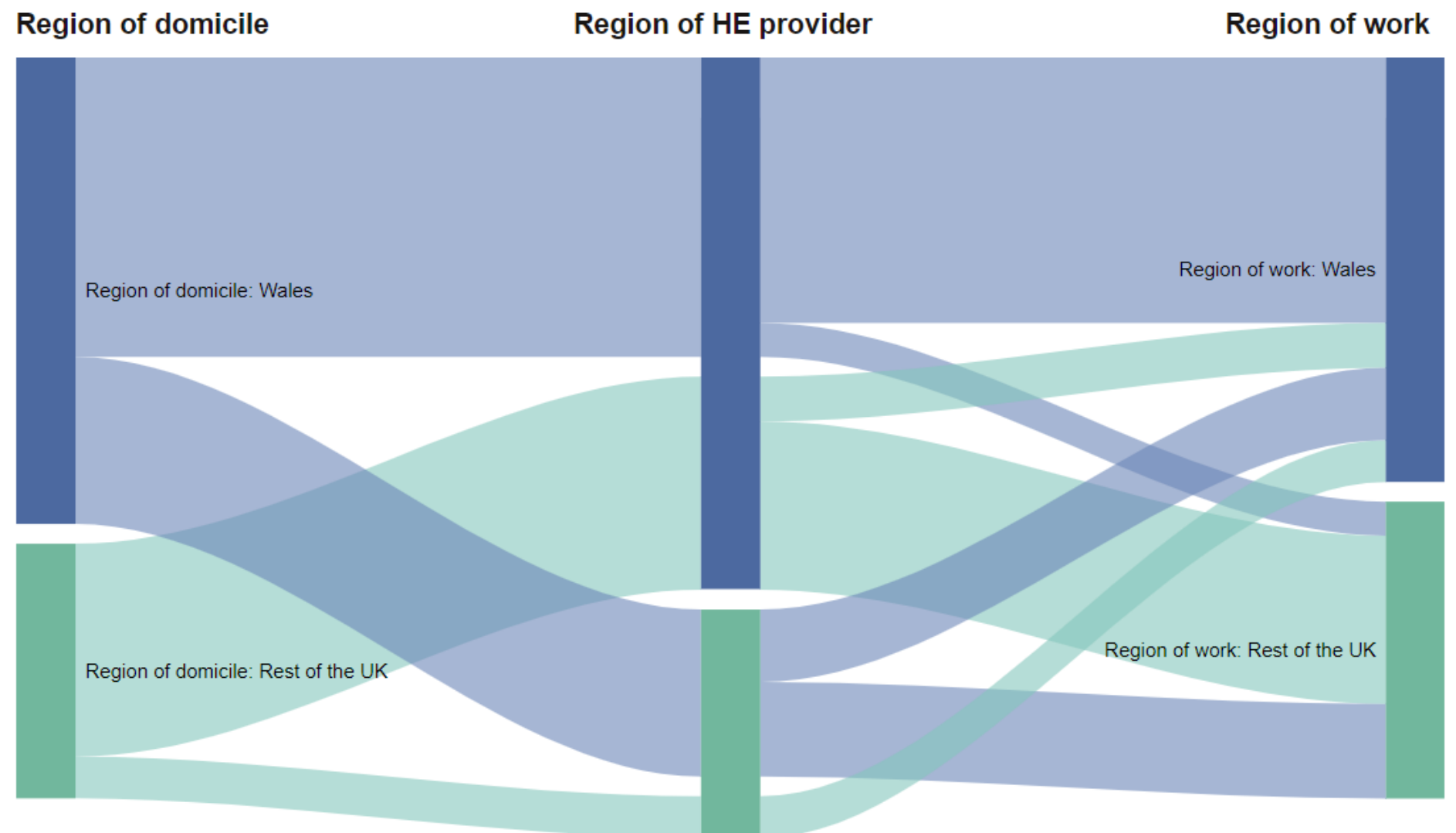


Figure 12: UK Domiciled graduates entering work in the UK by region of domicile, region of provider and region of work, 2021/2022. Higher Education Statistics Agency.

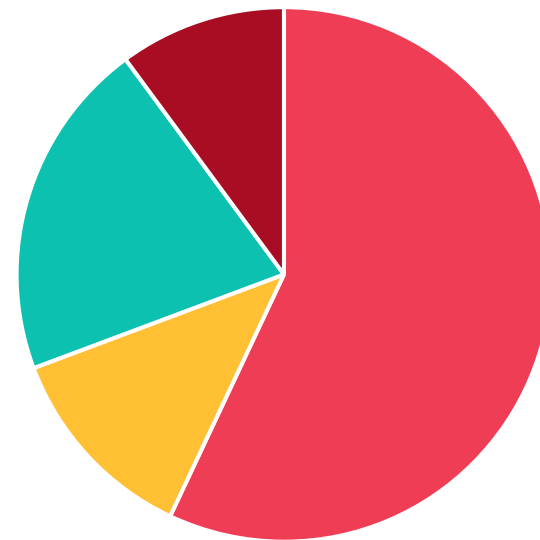
Recent graduates

Categories of graduates working in Wales and North Wales after 15 months, Ball

Figure 13 compares the proportion of UK graduates working in Wales vs. North Wales after 15 months by category. Overall, 72% of graduates working in North Wales are originally from Wales. North Wales has more returners and incomers than the Welsh average.

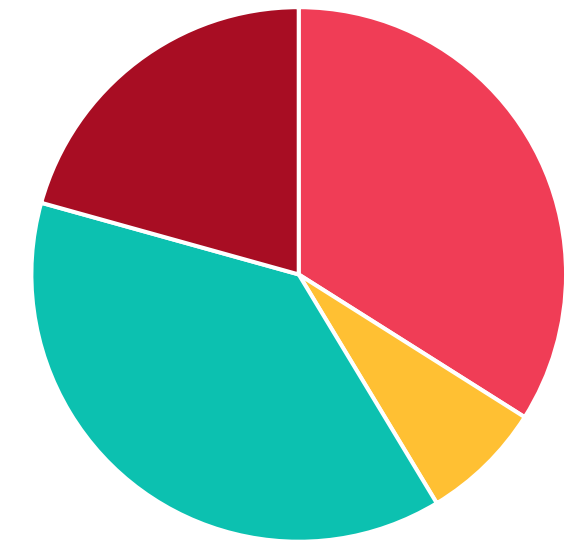
- **Loyals** are from Wales and studied in Wales. They make up most Welsh graduate employees.
- **Stayers** are from elsewhere in the UK and studied in Wales, then remained in Wales to work. Cardiff is a particularly important employment location for this group.
- **Returners** left Wales to study and returned home to work and are spread across Wales. This is an important group for North Wales.
- **Incomers** are graduates who are not from Wales and didn't attend Welsh institutions but work in Wales. They're often found in highly paid roles in health and engineering. Cheshire and Shropshire are two most common domiciles of Incomers to Wales. In North Wales, medicine was the most common job for Incomers, but IT and engineering were also important.

Graduate migration groups for UK domiciled graduates from 2021/2022 working in Wales after 15 months



■ Loyals ■ Stayers ■ Returners ■ Incomers

Graduate migration groups for UK domiciled graduates from 2021/2022 working in North Wales after 15 months



■ Loyals ■ Stayers ■ Returners ■ Incomers

Figure 13: Comparison of graduate migration groups in Wales and North Wales. Source: Stats Wales, Graduate Outcomes and Charlie Ball, Prospects Luminare.

Lived Experience – Elen Hughes

Bangor University Graduate and Stayer



Project Manager Menter Môn- Supporting Communities on Anglesey

Elen oversees community projects on Anglesey, focusing on initiatives that strengthen local opportunities and improve quality of life. Her portfolio includes:

Llwyddo'n Lleol: A £3 million campaign with targeted interventions aimed at persuading young people and families, particularly those at risk of leaving or who have already left, that a bright future is possible in their native communities. The campaign highlights the potential for good jobs in exciting fields within Anglesey.

Anglesey Community Fund: Funded through the Shared Prosperity Fund (SPF), this initiative supports projects across various themes, including Welsh language and culture, low carbon development, age-friendly initiatives, and environmental improvements.

Llangefni Rejuvenation Project: A key initiative to revitalize the town, fostering economic and community growth.

Elen's Personal Journey

Elen is the only one of eight close friends from Ysgol Botwnnog who has remained in the area. While she never had a definitive career plan, she kept an open mind and embraced new opportunities as they came.

After completing A-levels at Pwllheli, she initially planned to attend university away from North Wales, dismissing the idea of studying at Bangor University. However, during an Open Day at Bangor, she fell in love with the Welsh degree course and ultimately chose to enrol. Winning a scholarship made this decision easier, and she has no regrets—she notes that she went home less frequently than friends studying farther away!

After graduating, Elen held part-time jobs and travelled abroad before applying for a position at Menter Môn. The organisation appealed to her for its diversity of projects and opportunities. She began in Business Support, transitioned into Language Support, and eventually took charge of Llwyddo'n Lleol, leading to her current position. Her career has strongly influenced her personal decisions, including where she chose to settle down.

Elen occasionally wonders what it would be like to live elsewhere for a year or two, but speaking to friends who have travelled extensively, she questions whether it necessarily makes someone “better” or simply provides different experiences. While she hasn't lived far from home, she doesn't feel she's missed out and believes meaningful experiences can be gained through work and modern resources like podcasts.

The Value of Organisational Culture

Reflecting on her career, Elen feels much of her learning and worldliness has come through her rich work experiences. She values working for an innovative company that aligns with her personal values, emphasizing that organizational culture is often more important than salary.

This perspective resonates with participants of the Llwyddo'n Lleol programme, who increasingly prioritize company culture and shared values over financial incentives when choosing where to work.

Reflections on Housing and Place

Elen feels the housing situation in North Wales isn't discussed enough. She challenges the common perception of a lack of affordable housing, suggesting that while hotspots may be expensive, affordable options do exist in other areas—this is a universal issue, not unique to North Wales.

She is also deeply connected to the region and believes North Wales offers an exceptional quality of life, with its stunning countryside, opportunities for outdoor activities, and rich cultural events.

A Vision for Anglesey and Beyond

Elen's story exemplifies how embracing local opportunities, aligning work with personal values, and fostering a sense of place can lead to a fulfilling career and life in North Wales. Her leadership in community-focused projects highlights the region's potential to offer bright futures for those who stay or return, and her perspective emphasises the importance of reshaping the narrative to showcase what North Wales has to offer.

Recent graduates

Percentage of recent graduates in non-graduate roles

- 48% of recent Welsh graduates who are employed work in non-graduate roles:
 - This is the second highest in the UK, and well above the average of 37.8%.
 - However, it is important to note that the interview with Bangor university pointed out flaws in the current SOC system which may skew these figures, especially due to the high levels of employment in public sector roles.
- 34.5% of non-recent Welsh graduates are employed work in non-graduate roles.
 - This is similar to the rest of the UK, indicating that recent graduates are worse-off in obtaining graduate-level roles in Wales than their England counterparts.

Percentage of employed graduates who were working in non-graduate roles in 2022

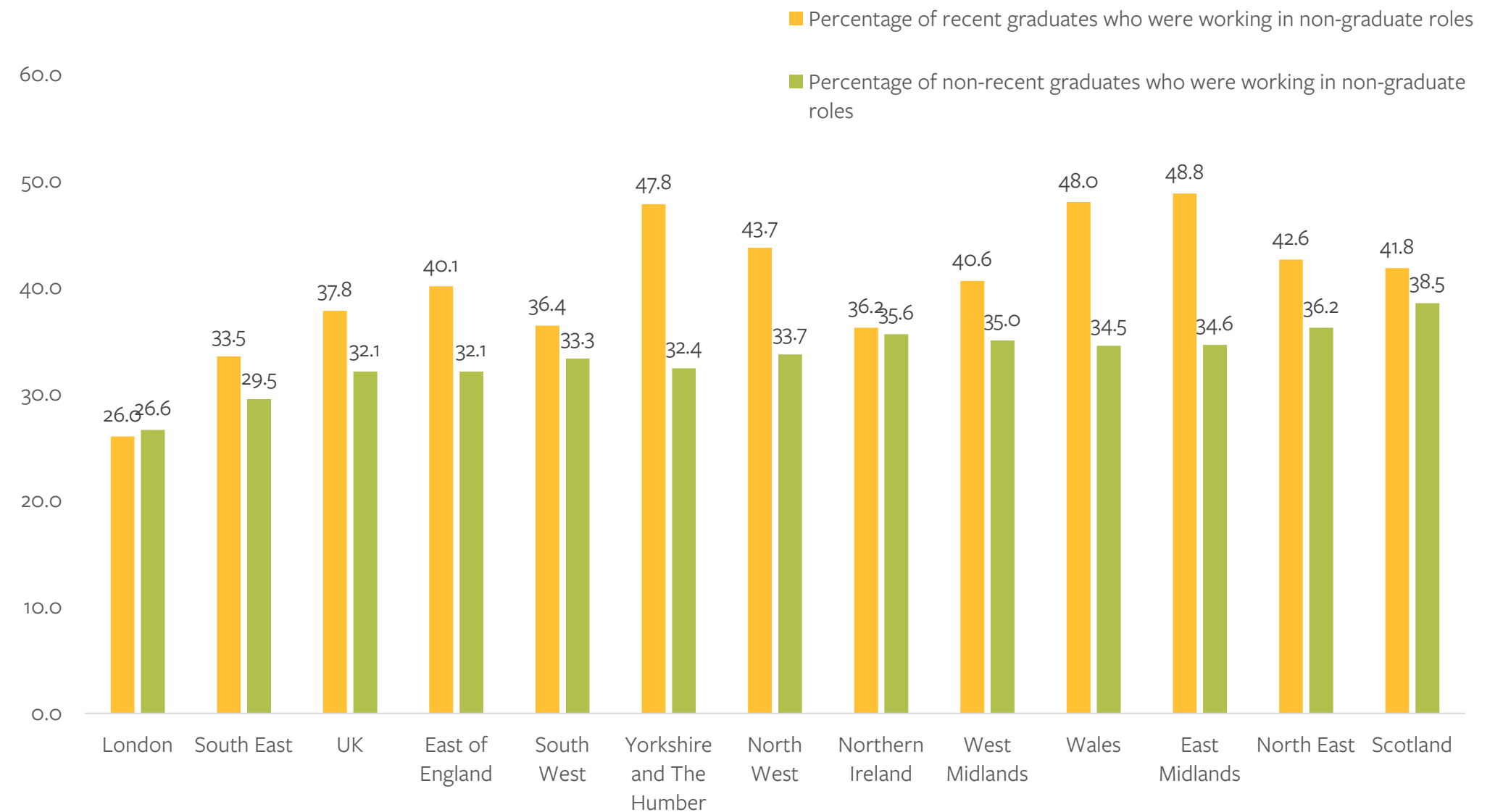


Figure 14: ONS Local: Employed graduates in non-graduate roles in parts of the UK, 2021 to 2022

Case Study – Bangor University Enabler of Higher Education Skills

Many graduates wishing to remain in the area have traditionally had to **create portfolio careers** due to a lack of diverse job opportunities. For example, a pair of graduates developed a wildlife DNA identification product successfully used by Edinburgh Zoo before being acquired. **In 2022, around 12% of graduates started businesses.** In Northeast Wales, these are often part of engineering clusters, while in Northwest Wales, startups tend to focus on marine and environmental sectors. 50% of graduates (1000) could potentially be interested in staying if there was the diversity and opportunities for work to attract them as they have often chosen Bangor because of its location.

“Evidence that came out today was that the majority of students from North Wales go out of North Wales to do their degree, but they’re the highest percentage that return for their career in North Wales.”

Hybrid working has been a significant enabler, particularly in IT, allowing people to live in North Wales while working remotely for companies elsewhere. However, data often reflects the office location of their employer, not where employees live or invest personally in the local economy.

Part-time work, defined as 30 hours or less, may appear as underperformance in statistics but is often a lifestyle choice, such as adopting a four-day work week for **better work-life balance.**

The lack of a UK-wide definition for graduate jobs, especially following changes to the Standard Occupational Classification (SOC) in 2020, further distorts data. **Many professional roles may be misclassified as administrative**, and green jobs, spanning multiple sectors, often go unrecognised. However, competition for professional roles remains high in North Wales, as the local economy supports a limited number of such positions and offers fewer opportunities for career progression.

Access to quality Continuing Professional Development (CPD) in North Wales is limited for the existing workforce. This is particularly significant for new graduates, as employers often highlight gaps in key workplace skills, despite students believing they have been adequately prepared. The rise of Artificial Intelligence (AI) is already reshaping workforce dynamics and will continue to drive the need for greater agility. Enhanced provision and better communication of CPD opportunities could strengthen workforce flexibility and make the region more attractive.

Students need **greater awareness of career opportunities in the nuclear sector**, which can be achieved through direct exposure to these pathways. For example, a computer science and electronic engineering graduate attended an event at Bangor University, which led to an apprenticeship with Hitachi and later a PhD in robotics. This experience transformed his perception of the nuclear sector, showing him its relevance and potential for career development.



Lived Experience – Gary’s Pritchard’s Journey and Reflections on Retaining Local Talent

Sponsored Returnee

Gary grew up in the north of Anglesey and attended Bodedern School. He later left to study becoming a dispensing optician at the University of Bradford, supported by a sponsorship and bursary from Alton Murphy, an optometry practice keen to recruit Welsh-speaking staff. Of the four students who received sponsorship, two—including Gary—returned to Wales, while one stayed in Yorkshire and another moved abroad, both repaying their bursaries as required. During his time at university, Gary noted that there was little integration with the local community, and no long-term connections were established. Therefore, returning to Anglesey after his degree was a natural decision for Gary—it never occurred to him not to come back.

Reflections on Schoolmates and Current Trends

Reflecting on his schoolmates from Bodedern’s 6th form, Gary observed that most have left Anglesey, pursuing jobs in fields unavailable on the island and settling elsewhere. However, he suggested that the current generation might behave differently, given how housing and lifestyle trends have shifted. While house prices have risen, they remain relatively affordable compared to other regions. This, coupled with the difficulty of buying a house elsewhere, may make it easier for people to consider returning to Anglesey. It’s not always the lack of jobs driving people away; for some, the appeal of city life or the desire for a change is a stronger factor. Gary also noted that, anecdotally, more people seem to be returning to the island after completing their degree or when starting a family, drawn back by the quality of life, family ties, and a sense of belonging.

Changing the Narrative

Gary emphasised the importance of changing the narrative around Anglesey. The prevailing belief among young people is often: “*There’s nothing here, so I need to leave.*” However, Gary believes this isn’t true. There are good jobs available locally, but young people need to see and experience these opportunities firsthand. He reflected on how young people are often pushed into making career decisions too early, without the chance to explore the range of work opportunities available to them. The current expectation to attend university—often requiring relocation—limits their options. Instead, Gary advocates for more creative and flexible pathways to education and work, such as working while pursuing a degree, degree apprenticeships or sponsored degree programs, or providing qualifications that enable young people to change careers later in life. Gary noted that people often feel pressured to “put themselves in a box” too young, locking themselves into decisions before they’ve had the chance to grow or explore alternative paths.

A Vision for the Future

Gary envisions a future where Anglesey is seen not as a place people leave, but as a thriving hub for education, career opportunities, and quality of life. By fostering pathways that allow young people to study, work, and grow without needing to relocate, and by ensuring infrastructure and inclusivity, the region can retain and attract talent while supporting the local community. Gary’s reflections call for a collaborative effort to think creatively about supporting young people, enabling diverse career opportunities, and changing the perception of Anglesey as a place of limited options to one of growth and potential.



The Role of Flexibility, Infrastructure, and Inclusivity

Gary highlighted the growing freedom to work remotely, which allows people to base themselves in North Wales while accessing jobs elsewhere. However, this flexibility can only thrive if supported by:

- Improved transport links: better infrastructure is critical for both professional and blue-collar workers.
- Diverse work opportunities: a focus on blue-collar jobs, not just professional careers, is essential. The blue-collar workforce is also leaving the region, and this trend must be addressed.
- Welsh language support: tailored language support should be available to those who need it, designed in appropriate formats to suit individual needs, particularly in professional and workplace contexts.

3.3/ Settling down

- *Stayers*
- *Returners*

Return migration

- Return migration is most prominent for ages 35-39, and 50-65 (settling down is a common theme).
- Not only driven by economic considerations. Moreso driven by:
 - Family considerations (feelings of settling down, caring for parents, children),
 - Social considerations (family and networks), and
 - Practical considerations (employment, housing).
- Also, sometimes incentivised by the government.

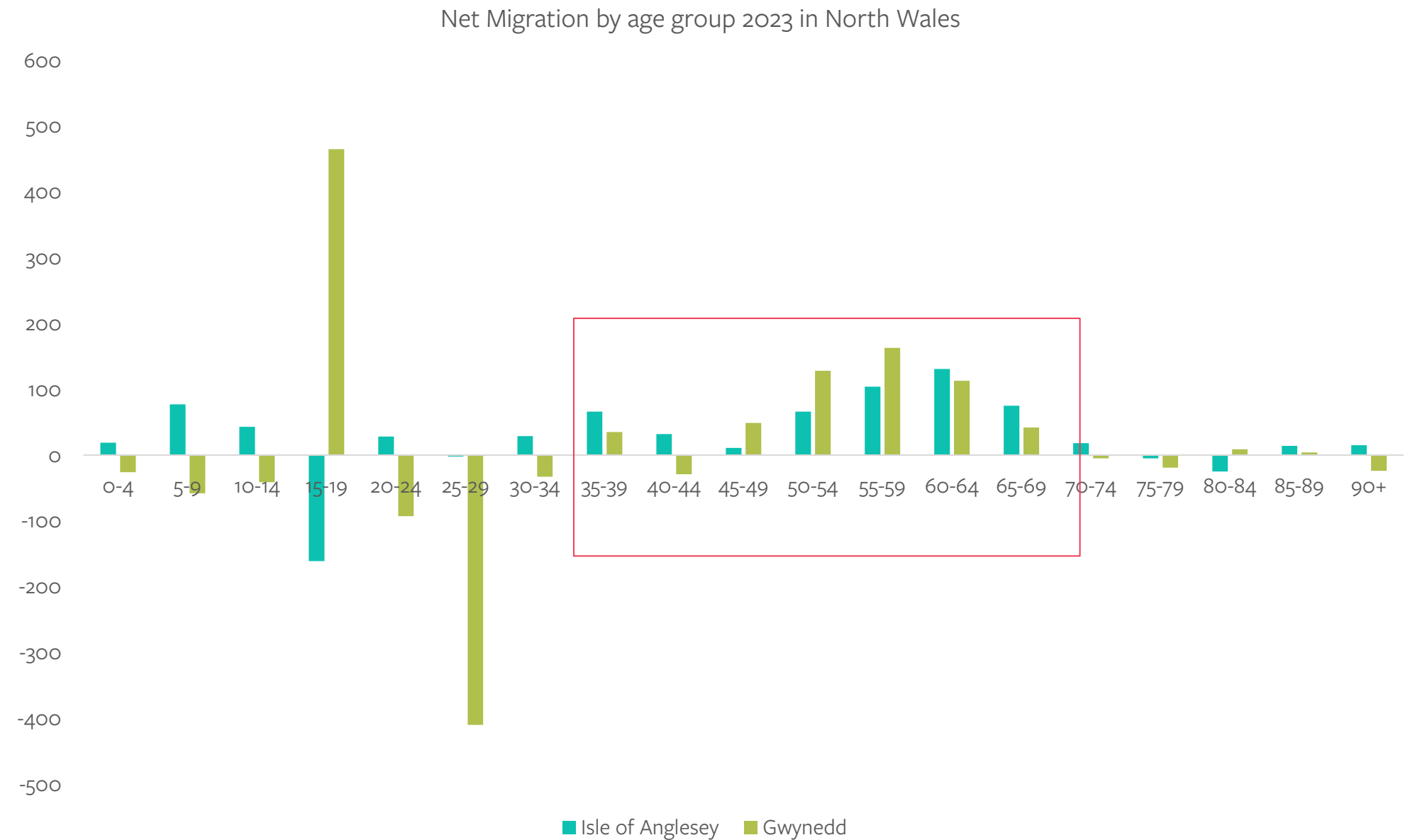


Figure 07: Net internal migration by age group in 2023, Office for National Statistics

Lived Experience – Dr Debbie Jones From North Wales to Nuclear Chemistry Unintended Returner

Debbie Jones grew up in North Wales and later moved to Manchester University to study Chemistry. Her decision was influenced by the university's strong chemistry department and the opportunity to experience city life. Reflecting on her mindset at the time, she recalls:

“If you wanted a career with prospects, you would need to leave North Wales, as I couldn't see what the prospects would be here.”

Following her undergraduate degree, Debbie pursued a PhD in Nuclear Chemistry at Manchester, earning her doctorate in 2016. During her PhD, she received an incredible opportunity—a three-month internship at Hitachi Research Labs in Japan. This experience exposed her to cutting-edge projects and allowed her to build international connections within the nuclear energy sector.

Returning to North Wales and Leadership at M-SParc

Debbie returned to North Wales and took on a key role at M-SParc in 2021, where she leads the region's Low Carbon Innovation activities. Her work involves providing business support, fostering connections between industry, academia, and government, and helping secure funding for innovative projects.

She notes that her Welsh language skills and understanding of the local region gave her an advantage in securing a job in North Wales. As she reflects:

“In England, I would have been one of many, but here I was able to take advantage of the uniqueness of the role.”

However, Debbie is keenly aware of the challenges: work opportunities in North Wales are scarce, and most individuals who return do so for specific roles.

Connecting with Leavers and Driving Nuclear Innovation

Debbie plays an active role in reconnecting with individuals who have left the region through initiatives such as the “Dewch yn Nôl” campaign, often leveraging her personal networks to reach out. Her leadership extends beyond M-SParc, where she also serves as:

- Executive Director for the North-West Nuclear Arc: Working with key stakeholders in industry, government, and communities to create a shared vision for nuclear energy across the region.
- Director of the Wales Nuclear Forum: Providing a central hub for those looking to stay updated on nuclear industry news and projects.

Reflections on Challenges in the Nuclear Sector

Debbie is vocal about the uncertainty surrounding local job opportunities in the nuclear and low-carbon sectors. She describes this as a “chicken-and-egg” situation:

“You can't develop the relevant skill sets and programmes if there's no pathway to a job at the end, which is the case at the moment.”

As an example, Debbie cites the 12 apprenticeships created through the Horizon project. While all these apprentices were successful in securing jobs with companies like EDF in Gloucestershire, few stayed in North Wales. She remains hopeful that, given the right opportunities, some may return.



Vision for North Wales

Debbie's work highlights the potential of low-carbon innovation in North Wales, particularly within the nuclear sector. She is committed to addressing the challenges of workforce uncertainty, creating opportunities for local talent, and attracting skilled individuals back to the region. By fostering partnerships, driving innovation, and advocating for long-term planning, she aims to build a future where North Wales becomes a hub for sustainable careers and groundbreaking projects.

Language Overview

Trends and Policy

- 2021 was the 2nd consecutive census that reported a decline in the number of Welsh speakers and lowest recorded to date (1.2% decrease since 2011).
- The Welsh Government's language strategy, *Cymraeg 2050*, aims for a million Welsh speakers by 2050.
 - They aim to do this by both promoting daily Welsh usage and fostering favourable conditions for language growth.
 - A key policy concern in this Strategy is the migration of Welsh speakers.
 - Supporting the socio-economic infrastructure of Welsh communities was identified as a way to address both issues.

Findings from Literature and Research

- Generally, first language Welsh speakers are more likely to stay or return if they move away.
- This is likely due to the strong connection between language, cultural identity, and community.
- Young rural first language speakers:
 - Are overrepresented in the contingent that stays in Wales and underrepresented in the contingent that leaves.
 - Are more positive about life in their rural area than others. They are particularly positive about the cultural and social opportunities of their area relative to their non-native speaking counterparts.
 - Some know they will need to move away for economic opportunities but are more likely to return if they do.
- Global Welsh survey of the Welsh diaspora found that only 10% of respondents maintain Welsh language use abroad.



Lived Experience– Gwenllian Roberts

Returner to settle

Executive Director Commercial Development/ Uwch Gyfarwyddwr Datblygu Masnachol Coleg Llandrillo Menai

Gwenllian began her educational journey without a clear career direction but with the expectation that she would attend college. She pursued a geography degree at Aberystwyth University, followed by a master's in Environmental Impact Management. Her master's thesis focused on supply chain and environmental management and included a placement with the Vale of Glamorgan Council.

Her professional career began when she was offered a role as an Environmental Assistant with AMEC in Great Yarmouth. In this role, Gwenllian worked on projects and conducted audits of offshore gas platforms. This experience in the oil and gas industry helped her develop resilience and build a strong foundation of knowledge. During visits back home to Wales, she shared her experiences with schoolchildren, inspiring them with insights into her work and career opportunities.

Although this was an excellent start to her career, Gwenllian made the decision to return to Wales, as living in a Welsh-speaking community was her top priority. She also wanted to raise her children in the same cultural environment she had grown up in. She took a position with the Welsh Government in Llandudno, where she challenged the notion that certain roles needed to be Cardiff-based, setting a precedent that empowered her colleagues to advocate for flexible working locations.

Gwenllian later embraced a completely different opportunity, working remotely for Ofwat, the water services regulator based in Canary Wharf. This role offered her a fresh perspective and valuable new experiences, and as she says you have to be “go get” when the opportunities arrive. Ultimately, she decided to return a position that was North Wales based to take up her current role at Coleg Llandrillo Menai, feeling excited about the dynamic opportunities and developments happening in her local area. As she says her career has always been “*I gyd i lawr I damwain a hap!*” (down to chance and circumstance) but propelled by personal drive and a willingness to seize opportunities.

Advocating for Role Models and Opportunities in North Wales

Gwenllian is passionate about the abundance of great role models in North Wales, showcasing the diversity of career paths available in the region. She believes there is a need to raise greater awareness in schools about these opportunities and to provide students with varied work experiences, rather than just the traditional roles .

A key challenge, in her view, is staying connected with those who have moved away from North Wales, ensuring they remain informed about career opportunities in the region. At the same time, it is equally important to support those who choose to stay, helping them find fulfilling roles locally. Gwenllian's vision emphasises the importance of fostering a thriving, connected community where young people can see the value in both staying in or returning to North Wales to build their careers and lives.



Strategic Collaboration with Community Groups

Gwenllian is deeply passionate about the value of local community groups and is directly involved with several projects in her area. She believes community projects have significant potential to provide essential local services and play a key role in fostering sustainable development. She sees a unique opportunity for future large-scale developments to formally integrate collaboration with community groups into their operations. By embedding this requirement into planning consent conditions, developers would be encouraged—or even obligated—to work directly with local communities, ensuring mutual benefits.

This approach could provide:

- Income and expertise for community groups throughout the lifetime of the project.
- Opportunities for community-driven initiatives, such as:
 - Community energy projects: Empowering local groups to contribute to and benefit from renewable energy schemes.
 - Environmental and biodiversity initiatives: Supporting projects that enhance local ecosystems and promote sustainability.

Gwenllian believes this strategic partnership model could not only strengthen community resilience but also align large developments with the needs and aspirations of local residents, fostering trust and collaboration.

Language

A typology of Welsh speakers' migration decisions, Bangor University

- This research investigated the motivating factors that drive the migration decisions of minority language speakers.
- Interviews with 60 Welsh speakers 18-40 who have stayed, left, or returned to the Welsh language 'heartlands' to understand typologies (Figure 15).
- Findings:
 - Welsh language is a significant consideration for some typology groups, but most prioritised other factors.
 - Employment was a key factor for sustaining Welsh speakers and attracting them back.
 - There are other motivating factors, but employment is still significant, and can be targeted by policy makers.
- Concluded that policy priorities should be on investing in a suite of initiative to target the needs of distinct typology categories, centred around an attractive environment, of which employment is key.

- Other recommendations:
 - Sectors like green energy could develop a reputation for interesting opportunities and career progressions.
 - Position self-employment as a desirable career path.
 - Improve opportunities for microenterprises and sole traders.
 - Upskill opportunities and progression routes.
 - Encourage skills building for young people where they will find good quality employment in the areas they want to stay (e.g., cannot compete with employment in urban areas, so should match skills to available jobs).
- Simply creating jobs is not enough as they need nuanced and targeted approaches with planning for specific groups.

Table 1. Typology of minority language speakers' migration decisions.

Category	Description	Dominant factor(s)/ issue(s)
<i>The 'Stayers' among young adults who speak a minority language</i>		
i. The Rooted	Are rooted to the community by choice. Choosing current location due to their social networks, and community use of the minority language.	Social characteristics (positive social connections); Cultural characteristics (e.g. minority language).
ii. The Faithful	Rooted within the community out of duty accompanied by a sense of belonging and/or commitment to a way of life.	Social and/or cultural characteristics, but acting as a tether.
iii. The Disengaged	Unsure about what to do, and that means staying. Lacking drive and direction to acquire more skills and experience.	Individual characteristics (e.g. apathy, low self-esteem).
iv. The Strategic	The ones who want to acquire valued skills and see the value in doing so close to home, and who are willing to stay if good local programmes are available.	Community characteristics (attractiveness of local education/employment options); Individual characteristics (e.g. discipline and foresight).
v. The Stymied	The ones wanting to stay but perceive there to be no employment or suitable housing. Thus, are flight risks.	Positive social and cultural characteristics, but concern for employment and housing.
vi. The Uncertain	Excited by options available elsewhere (employment and/or lifestyle) but lack the confidence to leave, and therefore make the most of what is available locally.	Individual characteristics (e.g. lack of confidence, uncertainty). Recognise that moving involves pros and cons.
<i>The 'Leavers' among young adults who speak a minority language</i>		
vii. The Cosmopolitan	Attracted by city life.	Individual characteristics (prefers or craves an urban lifestyle).
viii. The Urbanites	Feel the community is too small or feel like they're attracting unwanted attention.	Community characteristics (aspire to the anonymity of the city and/or a more inclusive community).
ix. The Reluctants	They want to stay locally, but suitable employment options are lacking locally for themselves and/or their partner.	Community characteristics (perceived unattractiveness &/or unsuitability of employment conditions trump positive social connections).
x. The Ramblers	Keen to leave for new adventures, and therefore leave for work and/or education. Comfortable with change.	Individual characteristics (i.e. inquisitive, comfortable with risk). Seeking new adventures in new places.
xi. The Academic Achievers	Select reputable education programmes or notable institutions for a subject.	Prioritises educational goals.
xii. The Careerists	Goes to the best job opportunity, regardless of the location. Driven by career goals.	Community characteristics (relative strength of local labour market. Willing to relocate to the one perceived to be the best, wherever that might be).
	Want to enjoy city life through a minority language e.g. Welsh	Community characteristics (craving or preferring a city lifestyle together with a

Figure 15: Summary table of authors' typology of minority language speakers' migration decisions.

Incentives and programmes for staying and returning

The Welsh government has provided incentives over the years to encourage people to stay in Wales, or return. ARFOR is a joint programme with the Carmarthenshire, Ceredigion, Gwynedd and Anglesey County Councils to trial innovative ways of supporting the economy the heartlands of the Welsh language through financial assistance to businesses, mentoring young people, supporting social enterprises, and promoting success stories through case studies. It is the only programme that looks at creating value through the Welsh language and aims to create networks and partnerships and add value local resources and assets.

Established in 2019, following an initial investment of £2 million by the Welsh Government.

- In the first phase to 2021, 154 businesses were supported, 238 FTE jobs were created, and 226 jobs were safeguarded.
- In October 2022 it was confirmed that the Welsh Government would provide a further £11 million to finance the second phase of ARFOR, which will run until March 2025.

Llwyddo'n Lleol 2050

One of ARFOR's programme projects, it has a number of initiatives it recognises the emigration of families and young people are one of the main reasons for a decline in the number of Welsh Speakers. It has a number of initiatives including:

- It's grant facility offers up to £5,000 to Welsh speakers and young families to move back to Carmarthenshire, Ceredigion, Gwynedd and Anglesey.
- Elfen Mentro supports groups of individuals offering weekly sessions with mentors and up to £1000 to develop a business ideas.

Huw Brassington's lived experience highlights the success of the programme.



Lived Experience – Huw Brassington

Returner via Arfor Programme



Head of Wales Office for Tenet Consultants

Huw grew up in Llandwrog, Caernarvon, and left to pursue an MEng in Aerospace Engineering at Bath University. After successfully completing his degree, Huw was eager to return to North Wales, where his only viable career option at the time was in education. He became a lecturer at Coleg Meirion-Dwyfor, where he taught for seven years.

A “Conveyor Belt to Nowhere”

During his time as a lecturer, Huw worked with many bright students with incredible potential. However, he observed a significant lack of local opportunities such as apprenticeships and quality employment, describing the situation as a “conveyor belt to nowhere.” Many students eventually moved away or commuted long distances for work, including one of his top students who lives in Bala but commutes to Bristol weekly.

After seven years, Huw decided to broaden his horizons. He took up an opportunity to work in New Zealand for a year as a Project Engineer with Jetpack, which gave him invaluable experience and a fresh perspective on career opportunities. Upon returning to the UK, Huw sought better prospects and relocated to Cumbria to work in the nuclear industry.

Life in Cumbria: Similarities and Differences

Huw found Cumbria to have many similarities to North Wales, including its beautiful scenery and close-knit communities, but a key difference was the availability of career opportunities. He felt more at home in the thriving nuclear sector and established roots in the area, as do many young people who move away to pursue better prospects.

However, Huw noted that the subtle but important differences—such as the Welsh language, family connections, and a sense of belonging—remained a draw to return to Wales. The changes brought about by Covid-19, particularly the flexibility of remote working, further opened up opportunities for employees to base themselves closer to home.

Returning to North Wales: A New Role at M-SParc

Huw eventually joined Tenent Consulting, a design consultancy specialising in highly regulated industries, based in Warrington. Recognizing the potential of North Wales as a hub for low-carbon innovation, Tenent established an office in M-SParc on Anglesey. The office allowed the company to manage projects across the UK while positioning itself to capitalise on future developments in the region.

Given his local knowledge and connections, Huw was a natural choice to lead the M-SParc office. He sees Anglesey as “a hotbed for low-carbon industries with a shining future,” particularly in energy sectors like tidal, wind, hydrogen, and nuclear. Huw notes that Tenent is taking a different approach by working with local value chains and using local suppliers, ensuring that investments benefit the entire community.

Building Talent and Opportunities

Huw is committed to bringing talent back to North Wales and creating local opportunities through apprenticeships and high-quality jobs. He has already started employing a local apprentice in the M-SParc office and emphasises the importance of initiatives such as the ARFOR Llwyddio’n Lleol programme, which offers relocation grants and apprenticeship support.

Huw himself was a beneficiary of a relocation grant, which helped tip the balance when he was deciding whether to move back to Wales. While he was keen to be closer to family, he had built a life and made friends in Cumbria. The grant provided a catalyst, making the decision easier. As Huw reflects:

“In the end, that was the catalyst in a way for me to come back.”

Vision for the Future

Huw envisions Anglesey and North Wales as a thriving hub for low-carbon innovation. By fostering local talent, investing in apprenticeships, and supporting local value chains, he hopes to create a sustainable ecosystem that retains and attracts talent while driving economic growth.

Huw’s journey highlights the importance of community, flexibility, and targeted support in enabling talented individuals to return to their roots while contributing to the region’s bright future.

Global Welsh Research into the Welsh Diaspora: Overview of Findings

Brain drain to brain gain, 2024

- 3.4 million Welsh people live outside Wales (equivalent to resident population). This survey targeted the diasporas and has been the most comprehensive - 1709 respondents.
 - 49% of respondents live in England
- Key research insights:
 - High economic potential (entrepreneurial and investment capacity).
 - Professional excellence (talent pool with strong entrepreneurialism and high educational attainment).
 - Cultural connection (92% are proud to be Welsh and have strong regional loyalties).
- They found there is significant interest from a highly skilled diaspora to return to Wales.
 - 54% considered returning with the primary motivator being family connections and career opportunities.
- However, they found key barriers (Figure 16).
- To capitalise on the opportunities for return migration, the report recommends that Wales should address:
 - Infrastructure and connectivity,
 - Economic opportunities,
 - Investment frameworks and support,
 - Public service quality,
 - Housing accessibility, and
 - Cultural engagement pathways.

The barriers to returning

Economic, social and personal considerations are all potential barriers to returning expressed by significant proportions of diaspora respondents. The most significant of these relate to economic conditions, housing, the quality of healthcare and educational standards:

Economic factors

- Overall economic conditions 54%
- Employment opportunities 41%
- Housing accessibility 18%

Social Infrastructure

- Healthcare quality 47%
- Education standards 47%
- Public services 24%

Personal considerations

- Family integration 24%
- Partner employment 24%
- Cultural readjustment 15%

Figure 16: Summary of survey responses about what the barriers are to returning, Global Welsh, 2024.

Global Welsh Research into the Welsh Diaspora: Findings for North Wales

Brain drain to brain gain, 2024

- The study revealed regional loyalties to North Wales. This group was constituted by a higher proportion of business owners and had stronger cultural ties to the region compared to other groups.
- The North Wales region also had the highest proportion of respondents who said they would consider returning.
- The professional profile indicates an opportunity for sector development in energy and tourism.
- The report recommends that each region develop action plans over the short, medium and long-term to harness regional opportunities arising from cultural ties.

NORTH WALES GROWTH DEAL		
Demographics 317 respondents	Education Profile	Professional Profile
<ul style="list-style-type: none"> • 49% aged 24-44 • 43% outside UK • 50% considering return 	<ul style="list-style-type: none"> • 34% undergraduate degrees • 32% master's degrees • 10% doctorate level 	<ul style="list-style-type: none"> • Higher proportion of entrepreneurs (24%) • Strong engineering presence • Significant STEM expertise • Energy and environment; tourism and hospitality; digital innovation (rural connectivity)

Figure 16: Summary of survey responses about what the barriers are to returning. Global Welsh, 2024.

Lived Experience – Lisa Birks

Returner to North Wales for Family and Community



Lisa grew up in North Wales after moving from Derby at the age of eight. Immersed in the Welsh language through school, she thrived academically and personally, becoming fluent in Welsh within months of arriving in North Wales thanks to the encouragement of her school and peers. The only member of her family to attend university, Lisa moved to Derby for higher education, seeking both academic advancement and freedom.

A City Career and a Difficult Choice

After becoming a mother during university, Lisa balanced her studies with work in the city, gaining valuable experience in call centres and recruitment. Derby offered a lot of choice including housing options, flexible employment, and career progression—things she found lacking upon returning to Wales. Despite a strong career and independence, Lisa felt the absence of her family support network and decided to move back home with her daughter.

Challenges of Returning

Returning to rural Wales was not easy. Lisa initially lived with family, and struggled to find housing, and faced barriers in securing a job that matched her skill set. She eventually purchased a rundown house with no central heating and raised her daughter on minimum wage. Despite these challenges, Lisa found strength in the safety, community, and bilingual culture of North Wales.

A Deep Sense of Belonging

Lisa is now a parish councillor in Llandecwyn and a strong voice for her community. Known locally as “Lisa Bank” from her former job at HSBC, she values the everyday connections that rural life offers—from neighbours helping each other, to the joy of being greeted by name on the High Street. Her experience reflects the richness of community life that cities cannot replicate.

A Vision for the Future

Lisa joined **Cwmni Eginio** with the hope that her children and grandson will not have to leave the area to find fulfilling work—as her partner has had to do. She sees enormous potential in rural communities like Porthmadog but stresses that this potential must be matched by **long-term vision and strategic investment**.

Lisa believes in the need for:

- **Strategic investment** in local industry and infrastructure
- **Partnerships with colleges and universities** to create strong training pipelines
- **Apprenticeships and practical experiences** that equip young people to stay and thrive locally

Her story underscores the importance of structural investment to support returners and secure a vibrant, sustainable future for North Wales.

Lisa’s experience illustrates the deep tension many face between pursuing professional opportunities and staying rooted in their communities. Her journey highlights the urgent need to invest in:

- **Jobs with purpose and progression**
- **Affordable, quality housing**
- **Community-led development**

Despite the challenges and sacrifices, Lisa wouldn’t trade the safety, identity, and sense of belonging she has in rural Wales. Her hope is simple yet powerful: that future generations won’t have to choose between opportunity and home.

Case Study – M-Sparc Driving Low Carbon Innovation in North Wales Enabling Facility



M-SParc is a central pillar in the development of the low carbon economy in North Wales. It acts as a hub for innovation, linking cutting-edge developments on Anglesey and across the region. Beyond offering office, lab, and networking spaces, M-SParc aims to build a cluster of low carbon energy companies while fostering connections with businesses in the supply chain.

A Vibrant Hub for Innovation and Collaboration

Tenants participating in focus groups view M-SParc as a critical piece of infrastructure, offering a vibrant space to work, meet, and network. Regular events held at M-SParc attract participants from near and far, promoting the region's innovative projects and reinforcing its reputation as a centre for low carbon development.

Support Programmes at M-Sparc

Egni Programme: Established in 2021, Egni provides skills development and decarbonisation support to add value to the low carbon sector. The programme promotes opportunities within the region, including the annual Dewch yn nôl campaign. Launched every January, this campaign encourages individuals who have left the area to return. It specifically targets Those in their 30s, seeking long-term career opportunities. And those in their 50s, who bring valuable experience and can mentor others.

Reasons for returning often include family ties, a sense of belonging, and the region's excellent work-life balance. While the rural environment can drive younger individuals to leave, it frequently becomes a compelling reason to return later in life.

Angel Network: Initially established as a mechanism for investors interested in the region, the Angel Network has evolved to offer mentorship support for local businesses and entrepreneurs.

Challenges in Talent Attraction

A significant challenge in attracting talent to the low carbon and nuclear sectors, as well as other industries, is the lack of certainty about future job opportunities. It's difficult to encourage individuals to invest in developing the necessary skills without clear assurances that jobs will be available.

Collaboration for Future Growth

Collaboration and partnership are essential to overcoming these challenges. If developers in sectors such as wind, tidal, and nuclear energy can coordinate their plans rather than working in isolation, it would be possible to design a cohesive programme that addresses the region's future workforce and skill needs. A united approach would provide the certainty needed to attract and retain talent, driving sustainable growth in North Wales' low carbon economy.



4/ Key findings: international migrants

International Migrants

- Thus far, the research has focused on Welsh natives, their migration patterns and reasons for leaving, staying, or returning.
- However, there is also an opportunity for North Wales to attract non-native Welsh populations from the UK, or internationally.
- It is not just about preventing people from leaving, or attracting people back, it could be about attracting people to Wales who have never lived there before.
- This will be particularly important for the low-carbon sector in North Wales that does not have enough local people to fill the demand that new development and investment could bring.

- Internal and international migration have both accelerated since the Covid-19 pandemic.
 - **Net internal migration** is around **2.5 times higher** than the average over the previous two decades.
 - **Net international migration** is around **4 times higher** than the average over the previous two decades.

This trend could help indicate what pull factors are important to international migrants, and thus what North Wales can bolster to attract more people beyond economic opportunities. For instance, the natural environment, community, culture and heritage.

From the interviews there are international workers attracted to the area, the main reason for them choosing to leave are for family reasons.

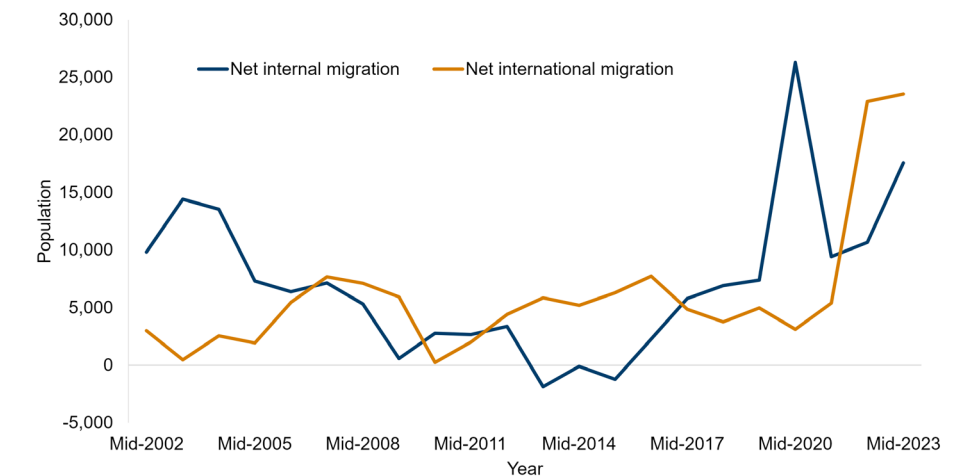


Figure 05: Net Internal and international migration in Wales, mid 2002 to mid 2023, Stats Wales

Lived Experience – Stevie Scanlan

A Journey from the City to the Countryside: Finding Fulfilment in Wales



Personal Perspective

Originally hailing from the South-East of England, Stevie began her career in the bustling City of London during the vibrant and dynamic dot-com boom. Working for a software company at the epicentre of technological innovation provided her with thrilling opportunities to travel extensively, including frequent trips to California, a hub of creativity and innovation. The trading floors and financial districts of London offered excitement and energy, making them the perfect environment for someone in their twenties. However, as the years went by, Stevie found the commute and lifestyle associated with London draining. The crowded trains, long hours, and relentless pace of the city began to take their toll.

Around the same time, the software start-up she had been part of was acquired by a larger corporation. The culture shift that came with the buyout left her feeling disconnected—the dynamic, innovative environment of the start-up was replaced by the bureaucratic, impersonal feel of a large corporation. Seeking new opportunities, she was headhunted by another start-up, but unfortunately the venture wasn't successful. This led to a shift in focus, and Stevie transitioned into PR and marketing, finding success in roles that allowed for more creativity and personal connection.

Having previously visited Wales on holiday, its natural beauty and welcoming atmosphere had left a lasting impression. The pull to leave London for a more fulfilling life grew stronger resulting in a move to Wales.

Stevie noticed a stark cultural contrast that resonated deeply with her. While people in the South-East often focused on outward markers of success—like the size of your house or your job title—North Walesians were more interested in you as a person. They cared about your passions, values, and what truly mattered to you, creating a more inclusive and welcoming community. Stevie initially began working as a freelancer for a local PR company, leveraging her branding expertise and building meaningful relationships. Though freelancing offered flexibility and creativity, having started a family, Stevie desired greater stability and structure, which led her to a position at Bangor University. This shift allowed her to balance professional security with personal fulfilment. Wales's unique challenges, including the diversity of job opportunities and the unfamiliarity of the Welsh language, were significant at first. However, with the rise of hybrid working and support from her employer with the language, many of these barriers have lessened, opening up new possibilities for personal and professional growth. The experience of living in North Wales reaffirmed Stevie's belief that the quality of life is not about material wealth but about community, connection, and a sense of belonging.

Work Perspective - Marketing and Recruitment for postgraduate and undergraduates College of Science and Engineering

Stevie believes that the Low Carbon Economy presents a significant opportunity to attract talent to the region and serves as a compelling draw for prospective students.

Students typically choose Bangor University for three key reasons:

1. The location and facilities, which highlight Bangor's unique appeal.
2. Personal recommendations or endorsements from friends, family, or alumni.
3. The quality and content of the courses, which meet students' educational and career aspirations.

However, barriers to university attendance remain, particularly for first-generation students. The primary concern is often the fear of personal debt, which can deter students from pursuing higher education. For those already in employment, degree apprenticeships provide an excellent way to overcome this barrier, combining work experience with academic qualifications. Unfortunately, the limited availability of such apprenticeships poses a challenge for recruitment efforts.

In response to the demand for specialised education, Bangor University has introduced an Engineering degree, which has already proven popular among students. However, retaining graduates in the local area requires more than strong academic offerings. High-quality placement opportunities are essential, as they enable students to gain practical experience, collaborate with local employers, and establish clear pathways to careers within the region. These placements not only benefit students but also help employers by connecting them to skilled, motivated graduates who are likely to remain in the area.

5 / Conclusion

Summary of key findings

Life Stages

The migration trends between Gwynedd / Anglesey and the rest of Wales / UK / international countries by location and age group can help us understand:

- When people tend to leave and return to North Wales.
- At which point in one's life interventions will be the most effective.

We have concluded that the greatest opportunities are at these intervention points:

1. Retaining the recent graduates that move to Bangor for university as they enter the workforce, including language support if needed.
2. Attracting recent graduates back to North Wales.
3. Encouraging and supporting more people to return at earlier stages in their lives.
4. Attracting those in their late twenties – early 30's prior to them settling down fully.

Push Factors

The following push factors were identified as reasons *why people leave Wales*:

- Greater and more diverse opportunities for education, employment, and other economic opportunities (or the ones available are not appropriate for their level of education / intended career path).
- Perceived lack of affordable housing.
- Greater diversity of cultural opportunities "buzz of city life (in rural areas).

Pull Factors

The following push factors were identified as reasons *why people stay in Wales*:

- Welsh language and culture (those who are first language).
- Appropriate jobs for their intended career.
- Transport to larger cities.
- Work-life balance.

The following factors were found as reasons *why people return or move to Wales*:

- Connection with cultural identity and community
- Family ties and caring responsibilities
- Opportunities for entrepreneurship and business
- Affordability of housing
- Natural environment
- Work-life balance
- A feeling of safety

Summary of key findings

The literature review and interviews also have revealed the following areas as potential areas for intervention:

- Digital infrastructure and digital skills
- Infrastructure and connectivity
- Quality housing
- Cultural and leisure offer
- Flexibility in job roles
- Employment opportunities that are appropriate for the career aspirations of young people
- Improving opportunities for self-employment and micro enterprises
- Better paid work
- Entertainment and leisure opportunities
- Match skills provision to available future work
- Welsh language support
- Support for non-Welsh speaking partners

As a summary of findings from literature and lived experience, this list of potential interventions is quite broad.

On the next page, we explore what this research means for future nuclear investment and the low-carbon economy in North Wales by setting out what the priorities could be going forward.

Conclusions

What does this mean for the low-carbon economy in North Wales?

This research has summarised the migration patterns of working age Welsh people and the reasons people stay, return or leave at different points in their lives. This was set in the context of significant expected low carbon energy infrastructure development cross the next decade in North Wales, and particularly nuclear investment.

For North Wales to secure the benefits of low carbon energy development, the sector and its stakeholders need to work collaboratively to fill the employment and skills gaps that have resulted (in part) from a net outflow of migrants from the region.

While this research supports the traditional narrative that economic opportunity attracts and retains people (and that the lack thereof pushes them away) it also highlights that there are a multitude of factors that underpin migration decisions, and these decisions happen multiple times across the course of one's life.

Moreover, the focus of workforce migration research has traditionally been on why people leave – forgetting those that stay, return or migrate to Wales.

While we know that young people are the largest source of outflow migration when entering higher education and the workforce, we also found that if they are motivated to migrate to a city for the social and cultural amenities it offers, they will do so – regardless of the pull factors in their home region.

Instead, the focus should be on providing opportunities for those who are already motivated to stay, return or migrate to North Wales and enhancing the social and cultural factors that drive these decisions. This means providing people who already have the motivation to stay, return or migrate with the capability and opportunity to do so as well, including provision of support to partners and children to settle in North Wales.

Creating jobs and supporting local people to access the training and education pathways into the low-carbon economy is not enough. These economic opportunities must be supported by social, cultural, and physical infrastructure that offers a great quality of life, beyond work.

Fortunately, North Wales has much to offer. These elements need to be amplified and communicated to the right groups.

Everyone needs to play their part: a declining working age population is a significant, multi-faceted challenge that needs a multi-faceted and collaborative solution.

Beyond providing employment, training and education, stakeholders in the low-carbon economy of North Wales could focus on three main areas:

1. Amplify and communicate all the great things North Wales has to offer – access to nature, community, work-life balance, Welsh language and culture.
2. Improve the deficiencies with creative solutions – transport infrastructure, housing, digital connectivity.
3. Take appropriate actions and communicate in a way that is relevant and specific to each life stage.

Conclusions

Priorities for North Wales and the nuclear sector

This research was conducted to inform which interventions the North Wales low-carbon energy sector can take to retain, attract enough people to work in future nuclear developments.

Major infrastructure projects have historically been a catalyst for change in North Wales through the development of local skills, employment, and businesses, and subsequent benefits that spread beyond.

There is potential for future nuclear developments to do the same, but this requires collaborative action.

The following list sets out actions for the low carbon energy sector that were identified through this research:

- Developing collaborations with universities and skills providers to focus on retaining young people in Wales and providing re-skilling and upskilling progression routes.
- Coordinating and collaborating across low-carbon energy projects to develop a pipeline of skills provision matched to future work.
- Developing a cohesive regional messages for the low-carbon energy sector and North Wales region's offer, targeted at different ages and corresponding priorities.
- Engaging with the Welsh diaspora and focusing on attracting those who may return to Wales with financial and other support (e.g., family, housing, skills, enterprise development).
- Utilise long-term view of development to invest in place-based interventions that address challenges such as infrastructure, connectivity, and the cultural/leisure offer nearby projects.
- Build awareness around the variety and quality of careers in low-carbon energy.
- Welsh language support for individuals, their families, and businesses.

Appendix A: Sources

Literature Review Publications

	Date	Author(s)	Geography	Description
Brain drain to brain gain: mobilising the Welsh diaspora as agents of economic change	2024	Dr. Sarah Louisa Birchley, Wesh Water, and GlobalWelsh	International Welsh diaspora	Report summarising the findings of the most comprehensive survey to date on the Welsh diaspora. The survey findings reveal opportunities for Wales regarding the diaspora's entrepreneurial network, highly educate talent pool, and strong cultural ambassadors.
Migration through a language planning lens: A typology of Welsh speakers' migration decisions	2024	Bonner, E., Prys, C., Hodges, R., & Mitchelmore, S.	Wales	This paper seeks to explain the migration decisions of minority language speakers by investigating motivating factors. Viewed through a language planning lens. Semi-structured interviews were conducted with 60 Welsh speakers aged 18–40 who have stayed, left, or returned to the Welsh language 'heartlands' to create a typology representing the diversity in speakers' priorities when deliberating migration decisions.
ARFOR, out-migration and the Welsh language: Findings from recent research on out-migration to inform the work of the ARFOR II programme	2024	Huw Lewis and Lowri Cunnington Wynn	Wales	Summarises the main conclusions of two research workshops on the topic of migration that were held during November 2023. The workshops were organized by the Centre for Welsh for Politics and Society, Aberystwyth University and Wavehill, as part of the work program of an 18-month research tender that aims to review and evaluate the work of the ARFOR II programme.
Written evidence submitted by Professor Michael Woods PCWo00g With particular reference to the question: "Are Young People Leaving Wales? Why"	2023	Michael Woods	Wales	Written evidence to the House of Commons Welsh Affairs Committee into Population Change in Wales referring to the questions asked in the call for evidence, 'Are young people leaving Wales?' and 'Why?'. The evidence draws on results from a survey of young people in Rural Wales,
Rural Wales Youth Survey	2022	Woods, Michael; Utz, Patrick	Rural Wales	This report presents the findings from a survey of over a thousand young people aged between 14 and 25 living in rural Wales, conducted between July and September 2021. A total of 1056 useable responses were received. Analysis of the survey results has been complemented by insights from seven discussion sessions with groups of young people in Ceredigion, Pembrokeshire and Powys.

Literature Review Publications

	Date	Author(s)	Geography	Description
A Rural Vision for Wales, Key policy proposals and asks	2021	Welsh Local Government Association	Rural Wales	Sets out the policy proposals for the rural economy that aim to enhance and complement future agricultural policy by addressing the complex range of challenges including skills base in the rural area.
A Rural Vision for Wales, Key policy proposals and asks	2021	Welsh Local Government Association	Rural Wales	Sets out the policy proposals for the rural economy that aim to enhance and complement future agricultural policy by addressing the complex range of challenges including skills base in the rural area.
Location, Location... Employment? Understanding Welsh graduate mobility over time	2012	Gillian Bristow, Madeleine Pill, Rhys Davies, Stephen Drinkwater	Wales	Sets out some of the key findings of research(see note at end) into the scale and nature of the problem, specifically the extent to which Wales retains its graduates in employment, and labour market outcomes for 'Welsh' (i.e. Welsh-born) graduates in relation to their migration behaviour. This seeks to provide some useful insights for the future development of Higher Education and regional economic development policies.
The Great British Brain Drain: Where graduates move and why	2016	Paul Swinney and Maire Williams, Centre for Cities	Great Britain	Summarises data across the UK's cities around graduate migration, and recommends policy responses beyond graduate attraction and retention for long-term attraction.

Literature Review Articles

	Date	Author(s)	Geography	Description
What do graduates do? Wales	2024	Charlie Ball, Prospects Luminate	Wales	An in-depth look at the graduate labour market in Wales, including a region-by-region analysis at graduate outcomes and patterns of migration
Devil's Advocate: We can't do anything about the "Brain Drain"	2023	Owen Donowan	Wales	Argues that Wales cannot stand in the way of any person that wants to move away. The only way to solve the brain drain problem is for pull factors to outnumber the push factors consistently across the country, and this requires a sift in economic policy-making.
IWA View: No Country for Young Folks: Looking for the Full Picture of the Welsh 'Brain Drain'	2021	Dr Jack Watkins, Institute of Welsh Affairs	Wales	Dr Jack Watkins from the IWA explores the realities of the 'Brain Drain' – and asks how Wales can be a good place to live for young people.
Are young people forced out of Wales to find work?	2024	Brendon Williams, BBC News	Anglesey	Presents profiles of Welsh young people and datasets to understand migration.
The truth of the Welsh brain drain as told by people who have moved away	2023	Branwen Jones, Wales Online	Wales	Presents profiles of Welsh young people and datasets to understand migration.
Outward migration: lessons from England	2020	Dr Dyfan Powell, Wavehill	Arfor area	Summary of migration in rural areas of Wales to understand and address out-migration and concludes with policy recommendations.

Literature Review Datasets

	Date Published	Author(s)
Sub-national population projections (local authority) additional variant projections: 2018	2021	Stats Wales
Graduate Outcomes 2021/22: Summary Statistics - Graduate salaries and work locations	2024	Higher Education Statistics Agency
Migration between Wales and the rest of the UK by local authority, flow, sex and age	2021	Stats Wales
Assessment of the Initial Census Results in Wales	2022	Lichfields
ONS Local: Employed graduates in non-graduate roles in parts of the UK, 2021 to 2022	2023	Office for National Statistics

Interview participants

Name	Organisation
Debbie Jones	M-Sparc
Huw Brassington	Tenent
Elen Hughes	Menter Mon
Owain James	Darogan Talent
Lisa Birks	Cwmni Eginio
Gary Pritchard	Plaid Cymru councillor
Gwenllian Roberts	Coleg Llandrillo Menai
Alex Charnley	Bangor University
Chris Drew	Bangor University
Anwen Davies	Arfor
Sarah Schofield	Adra