

Monmouthshire Replacement Local Development Plan

Sustainable Settlement Appraisal

March 2020



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**Monmouthshire County Council
Replacement Local Development Plan**

Sustainable Settlement Appraisal

March 2020

Planning Policy Service

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Executive Summary

- i. Reflecting the Plan's aim of creating sustainable resilient communities, the purpose of this appraisal is to identify those settlements which are potentially suitable to accommodate future housing and employment growth in terms of their location, role and function. This involves an assessment of the current role and function of settlements, as well as an understanding of the relationships between settlements and their potential future roles.
- ii. The appraisal has analysed a large amount of information to help determine the role and function of settlements within the County and builds on the work undertaken for the Function and Hierarchy of Settlements Study (October 2008) which informed the settlement hierarchy for the adopted LDP.
- iii. The work has been undertaken using a scoring system against three principles, based on the regional SEWSPG methodology, with some adjustments to ensure a locally relevant scoring system. The three primary principles used to analyse each settlement are:
 - Principle 1 – The level of sustainable transport and accessibility in and around settlements
 - Principle 2 – The availability of local facilities and services in and around settlements
 - Principle 3 – The level of employment opportunities in and around settlements
- iv. Consideration of each of these principles together with a settlement's population size, has assisted the process of identifying a settlement hierarchy based on this quantitative assessment and can be used as part of the evidence base to inform decisions as to where development should be spatially located in relation to existing settlements to achieve a sustainable pattern of growth.
- v. To supplement the analysis the appraisal has also identified broad geographical clusters of settlements. PPW 10 (para 3.36) states that "*Local service centres, or clusters of smaller settlements where a sustainable functional linkage can be demonstrated, should be designated by local authorities as the preferred locations for most new development including housing and employment provision.*" The cluster analysis recognises the role and function that smaller settlements play within the County.
- vi. The appraisal confirms the dominant role of the County towns of Abergavenny, Chepstow, Caldicot and Monmouth. All four towns score highly against the three principles reinforcing their function as service centres for their rural hinterlands. Monmouth, due to its lack of a railway station within the town and the relative distance to access the nearest railway station achieves a lower score against principle 1 than the other towns. However, it achieves a comparably high score against the other two

principles. Over half of the population of the County live within one of these settlements, benefiting from their accessibility and the range of services and facilities that they offer. The relative self-containment of these settlements compared to other settlements within the County justifies their classification as Primary Settlements which can be maintained and strengthened through future sustainable development.

- vii. In addition to the four Primary Settlements there are two other settlements, Magor Undy and Usk, which also perform well, justifying their position as Secondary Settlements. Whilst not having the full range of facilities offered by the Primary Settlements, they provide services which benefit both their residents and the surrounding rural hinterlands, with Magor Undy in particular benefiting from its location in the M4 corridor and its proximity to sustainable transport modes and to Newport.
- viii. Outside of these two settlements there is a distinct group of other Secondary Settlements. Of these Llanfoist and Rogiet are the higher scoring settlements, with Caerwent, Raglan and Penperlleni also performing well in terms of the appraisal. It is anticipated that whilst these Secondary Settlements do not offer the full range of services and facilities that can be found in the Primary Settlements they would be capable of supporting some additional sustainable growth. The scale of future planned development should reflect their individual role, function and size, acknowledging that these settlements currently provide local services/facilities to meet the needs of their immediate vicinities.
- ix. The cluster analysis recognises that some of the lower tier settlements in the appraisal have a geographical and functional relationship with a Tier 1 settlement in the matrix and so, whilst achieving lower scores, may be capable of supporting some additional future development. The settlements along the M4 corridor in particular exhibit strong geographical and functional relationships with both each other and with the larger settlements in the vicinity. This cluster not only contains the Tier 1 Primary Settlement of Caldicot it also contains the three Tier 2 Secondary Settlements of Magor Undy, Rogiet and Caerwent. It is considered that after the Primary Settlements of Abergavenny, Chepstow and Monmouth, the Severnside cluster with its good transport links, employment opportunities and range of services offers the most sustainable location for future growth.
- x. Outside of the Primary, Secondary and Severnside settlements there are other settlements in the matrix that will also provide supplementary opportunities for sustainable development; again the scale of development should reflect their individual roles, functions and size. It is recognised, as set out in national planning policy (PPW10), that appropriate levels of development could help maintain the viability of these settlements by providing increased custom for local businesses and also enable small scale employment opportunities to help sustain their populations and attract a more balanced demography.
- xi. The proposed settlement hierarchy for the RLDP is given below, this will be subject to further refinement as the Plan progresses.

Primary Settlements

Abergavenny (including Llanfoist)
Chepstow
Monmouth (including Wyesham)

Severnside

Caldicot
Caerwent
Crick
Magor Undy

Portskewett
Rogiet
Sudbrook

Secondary Settlements

Penperlleni
Raglan
Usk

Main Rural Settlements

Devauden
Dingestow
Grosmont
Little Mill
Llandogo
Llanellen
Llangybi
Llanishen

Mathern
Penallt
Pwllmeyric
Shirenewton Mynydd bach
St Arvans
Trellech
Werngifford Pandy

Minor Rural Settlements

Bettws Newydd
Broadstone/Catbrook
Brynygwenin
Coed y Paen
Cross Ash
Cuckoo's Row
Great Oak
Gwehelog
Llanarth
Llanddewi Rhydderch
Llandegveth
Llandenny
Llangwm

Llanover
Llansoy
Llantilio Crossenny
Llantrisant
Llanvair Kilgeddin
Llanvair Discoed
Llanvapley
Mitchel Troy
Penpergwm
The Bryn
The Narth
Tintern
Tredunnoch

1. Purpose of this Appraisal

- 1.1 Reflecting the Plan's aim of creating sustainable resilient communities, the purpose of this appraisal is to identify those settlements which are potentially suitable to accommodate future housing and employment growth in terms of their location, role and function. This involves an assessment of the current role and function of settlements, as well as an understanding of the relationships between settlements and their potential future roles.
- 1.2 A comprehensive range of variables need to be considered as part of this process to assist in establishing a sustainable settlement hierarchy that can inform the Monmouthshire Replacement Local Development Plan (RLDP) by identifying the most appropriate locations to accommodate future growth in order to achieve a sustainable pattern of growth, minimise unsustainable travel patterns and support local services and facilities. This process is fundamental to achieving the RLDP's vision which is set out in the Draft Issues, Vision and Objectives Paper. This envisions Monmouthshire as a place where people live in sustainable, resilient communities that support the well-being of current and future generations and are more inclusive, cohesive, prosperous, vibrant and balanced demographically, with both urban and rural communities well-connected with better access to local services and facilities, open space and employment opportunities.
- 1.3 An assessment of the availability of services and facilities in the towns and villages of Monmouthshire was an important part of the evidence base for the adopted Monmouthshire Local Development Plan (February 2014). The outcome of this assessment was published in the Function and Hierarchy of Settlements Study (October 2008). Understanding the level of services and facilities within settlements and the links between settlements remains important in determining the sustainability of the County's settlements.
- 1.4 This settlement appraisal will enable settlements to be grouped into different tiers based upon their role and function and will thus help to inform the Plan's settlement hierarchy. However, it should be noted that the results of this assessment will form part of a larger evidence base and whilst it will give some indication of the relative sustainability of the settlements there are other criteria that will also need to be taken into consideration. For instance any decisions on whether or not to allocate particular sites for development in the settlements will also depend on such issues as their impact on the physical form of the settlement, landscape setting, agricultural land quality, environmental constraints and infrastructure capacity among other considerations.
- 1.5 This appraisal outlines the sustainable settlement appraisal methodology, its subsequent application and analysis of information to provide conclusions on settlement roles and functions. This will constitute a key part of the evidence base for the RLDP.

2. Context

2.1 Background to Settlements within Monmouthshire

2.1.1 Located in South East Wales, Monmouthshire occupies a strategic position between the major centres in South Wales and the South West of England and the Midlands. The County covers an area of approximately 88,000 hectares (880 square kilometres) with an estimated 2017 population of 93,590¹, of which around 8% reside within the Brecon Beacons National Park Area of the County. The authority is predominantly rural with a mixture of market towns and villages. The County has a rich and diverse landscape stretching from the coastline of the Gwent Levels in the south of the County, to the uplands of the Brecon Beacons in the north-west and the river corridor of the Wye Valley Area of Outstanding Natural Beauty in the east.

2.1.2 The County has a distinctive identity arising from its location in the borderlands between England and the industrial heartland of South Wales. An integral element of Monmouthshire's distinctive settlement pattern arises from its historic market towns and villages and their relationship with the surrounding rural areas. The main settlements are the County Towns of Abergavenny, Caldicot, Chepstow and Monmouth which offer a wide range of opportunities for employment, shopping, community facilities and public transport. Outside of these are the smaller settlements of Usk, Raglan, Penperlleni, Llanfoist and Magor/Undy and a number of smaller rural settlements.

2.2 Policy Context

Planning Policy Wales Edition 10 (December 2018)

2.2.1 Planning Policy Wales (PPW, Edition 10, December 2018) sets out the land use planning policies and overarching sustainable development goals for Wales, revised to contribute to the statutory well-being goals of the Well-being of Future Generations Act. The Well-being Act provides a clear definition of sustainable development and has established seven well-being goals which are intended to shape the work of all public bodies in Wales, these are:

- A prosperous Wales,
- A resilient Wales,
- A healthier Wales,
- A more equal Wales,
- A Wales of cohesive communities,
- A Wales of vibrant culture and thriving Welsh Language, and
- A globally responsible Wales.

¹ 2017 Mid-Year Population Estimate

- 2.2.2 PPW 10 states that *“Sustainable Places are the goal of the land use planning system in Wales...all development decisions...should seek to contribute towards the making of sustainable places and improved well-being”* (PPW 10, para 2.2). It goes on to state (as set out in Figure 3: Key Planning Principles – Achieving the Right Development in the Right Place), that the planning system can create and sustain communities by *“...creating well-designed places and cohesive rural and urban communities which can be sustained by ensuring the appropriate balance of uses and density, making places where people want to be...”*
- 2.2.3 PPW 10 secures a presumption in favour of sustainable development and considers a Plan-led approach to be the most effective means of securing sustainable development through the planning system. PPW 10 has a strong focus on promoting placemaking, which is considered instrumental to achieving sustainable places, delivering socially inclusive development and promoting more cohesive communities. Placemaking is deemed a holistic approach that *“...considers the context, function and relationships between a development site and its wider surroundings”* (PPW 10, p.16).
- 2.2.4 To achieve sustainable placemaking PPW 10 states that development plans should:
- identify areas and sites for new development...based not only on the consideration of the needs of existing urban and rural areas but also future relationships between urban settlements and their rural hinterlands, particularly in the light of ensuring strong rural and urban communities, maintaining places which are resilient to the effects of social and economic change and are resilient in the light of the impacts of climate change. (PPW 10, para. 3.37)
 - include a spatial strategy covering the lifetime of the plan which establishes a pattern of development improving social, economic, environmental and cultural well-being. (PPW 10, para. 3.38)
 - prioritise the use of suitable and sustainable previously developed land and/or underutilised sites for all types of development. (PPW 10, para. 3.39)
 - promote viable urban and rural retail and commercial centres as the most sustainable locations to live, work, shop, socialise and conduct business (PPW 10, para. 4.33)
 - ensure new development is located and designed in a way which minimises the need to travel, reduces dependency on the private car and enables sustainable access to employment, local services and community facilities. (PPW 10, para. 4.0.3)
 - conserve and, where possible, enhance the countryside for the sake of its ecological, geological, physiographic, historical, archaeological, cultural and agricultural value and for its landscape and natural resources...balanced against the economic, social and recreational needs of local communities and visitors. (PPW 10, para. 3.34)
 - foster adaptability and resilience for rural places in the face of the considerable challenge of maintaining the vibrancy of communities and availability of services

as well as contributing to the Cohesive Communities well-being goal. (PPW 10, para. 3.34)

- 2.2.5 PPW 10 emphasises the link between the number of homes due to be provided and the expected job opportunities, as well as the location of any new development in relation to existing or planned infrastructure. This is important to minimise the need to travel, reduce private car reliance and increase opportunities for cycling, walking and the use of public transport. Development plans are deemed to “...provide the main means for achieving integration between land use and transport planning” (PPW 10, para. 4.15).
- 2.2.6 At the same time PPW 10 recognises that for most rural areas the opportunities for reducing car use and increasing walking, cycling and use of public transport are more limited than in urban areas. Due to this PPW advises that in rural areas most new development should be located in settlements which have relatively good accessibility by non-car modes when compared to the rural area as a whole. Development in these areas should embrace the national sustainable placemaking outcomes and, where possible, offer good active travel connections to the centres of settlements to reduce the need to travel by car for local journeys. (PPW10, para. 3.35)
- 2.2.7 Additionally PPW 10 advises that *“Local service centres, or clusters of smaller settlements where a sustainable functional linkage can be demonstrated, should be designated by local authorities as the preferred locations for most new development including housing and employment provision. The approach should be supported by the service delivery plans of local service providers”*. (PPW 10, para. 3.36)

Technical Advice Note 4 (TAN 4) – Retail and Commercial Development (2016)

- 2.2.8 TAN 4 promotes a ‘town centre first’ approach that recognises retail and commercial centres as diverse, mixed use focal points that should be primary considerations when assessing the most appropriate places for a wide variety of developments. It is emphasised that the *“...co-location of these uses and their high levels of accessibility by a range of transport options make them sustainable locations”* (TAN 4, para.2.1).
- 2.2.9 TAN 4 reiterates the important role that retail and commercial centres play in creating sustainable locations, seeking to ensure they have a positive future. It states that *“...good access to and within, retail and commercial centres is key, both to the vibrancy of those places and to ensure that everyone in society has access to the wide variety of goods and services.”* Furthermore Development Plans should ensure access is sustainable in nature by promoting the ability to *“...walk, cycle or use public transport to get to retail and commercial centres...”* (TAN 4, para.2.7).
- 2.2.10 TAN 4 demonstrates the need to consider retail and commercial centres when considering the sustainability of a location both in terms of their mix of uses and their

accessibility. Monmouthshire County Council is predominantly a rural county and some of the more rural settlements have limited or no retail and commercial services serving them. Therefore, as part of the assessment, it is important to take into account the functional linkages between the rural settlements and supporting town centres.

Technical Advice Note 6 (TAN 6) – Planning for Sustainable Rural Communities (2010)

- 2.2.11 TAN 6 develops upon the principles outlined in national planning policy guidance. With regard to informing the location of development TAN 6 advises *“Development plans should set out the spatial vision for rural communities. This should be based on a sound understanding of the functional linkages within the area and the potential for improving the sustainability of the existing settlement pattern. Many rural communities can accommodate development, particularly to meet local needs. New development can help to generate wealth to support local services, ensuring that communities are sustainable in the long term.”* (TAN 6, para 2.2.1). In accordance with TAN 6, an audit of rural services and facilities by individual settlement and the consideration of functional linkages within the area has been undertaken to inform the settlement strategy for the RLDP.

Technical Advices Note 18 (TAN 18) – Transport (2007)

- 2.2.12 TAN 18 sets out the Welsh Government’s aim to promote sustainable transport in Wales. The TAN focuses on achieving the Welsh Government’s environmental outcomes in its Environmental Strategy by (TAN 18, para.2.3):

- Promoting resource and travel efficient settlement patterns;
- Ensuring new development is located where there is, or will be, good access by public transport, walking and cycling thereby minimising the need for travel and fostering social inclusion;
- Encouraging the location of development near other related uses to encourage multi-purpose trips;
- Promoting cycling and walking;
- Supporting the provision of high quality, inclusive public transport; and
- Ensuring that transport infrastructure or service improvements necessary to serve new development allow existing transport networks to continue to perform their identified functions.

- 2.2.13 TAN 18 (para. 3.4, 2007) goes on to emphasise the need to identify residential sites in accessible areas which have good links to jobs, shops and services by modes other than the car and where public transport services have existing or planned capacity to absorb further development. Based upon this settlement policies should:

- Promote housing development at locations with good access by walking and cycling to primary and secondary schools and public transport stops, and by all modes to employment, further and higher education, services, shopping and

leisure, or where such access will be provided as part of the scheme or is a firm proposal in the Regional Transport Plan;

- Ensure that significant new housing schemes contain ancillary uses including local shops, and services and, where appropriate, local employment;
- Include policies and standards on density, and parking to achieve higher residential densities in places with good public transport accessibility and capacity;
- Encourage residential layouts that incorporate traffic management proposals such as home zones, calming measures and 20 mph zones and where appropriate, layouts that allow public transport to pass through easily; and
- Require layouts and densities, which maximise the opportunity for residents to walk and cycle to local facilities and public transport stops.

2.2.14 This reiterates the importance of sustainable transport when identifying sustainable settlements, as TAN 18 advises sustainable transport is a key element of Development Plans. The theme of sustainable transport and accessibility is given considerable weight in national guidance and places an onus on Local Authorities to prioritise it.

2.2.15 TAN 18 also acknowledges the difficulties of creating sustainable locations in more rural areas. It notes *“Transport issues in rural areas will vary depending on the relative isolation from major urban centres. Long distance out-commuting from rural areas raises sustainability issues given the length of the journey and the rural location means that conventional public transport is unlikely to be viable in response. Local authorities should therefore consider whether different policy approaches are required depending on the proximity of rural areas to urban centres. For example, the development plan strategy may require a more decentralised approach to employment location in order to minimise overall private car mileage in an area without strong functional linkages to larger settlements. For a rural area close to a large urban area for example, development serving local needs may be directed to settlements to provide sufficient demand to enable public transport services to extend from the main centre.”* (TAN 18, para.3.13, 2007). Therefore, it is important to understand the nature of settlements to help inform the development plan strategy and ensure the sustainable location of development as set out in PPW and TAN 18.

2.2.16 In addition to the guidance in the TAN the Transport Act 2000, as amended by the Transport (Wales) Act 2006, requires the Council to produce a Local Transport Plan (LTP) every five years and to keep it under review. A Local Transport Plan will be prepared alongside the RLDP.

Technical Advice Note 20 (TAN 20), Planning and the Welsh Language, 2017

2.2.17 TAN 20 provides advice on incorporating the Welsh language in development plans through Sustainability Appraisals, whilst also outlining procedures for windfall development in areas where the language is particularly significant. The TAN stresses the need to assess the potential cumulative effects of development across the Plan

area; specifically how the strategy and policies are likely to impact on use of the Welsh language and the sustainability of communities. The spatial distribution of new development and infrastructure can be used as a strategic means of supporting the language based on the findings of the Sustainability Appraisal.

- 2.2.18 PPW 10 also highlights the importance of considering the likely effects of development plans on the use of the Welsh language. In order to achieve this it recommends “...a broad distribution and phasing of development that takes into account the ability of the area or community to accommodate development without adversely impacting use of the Welsh language” (PPW 10, para 3.26) is required. Monmouthshire has a relatively low percentage of its population who have skills in Welsh. At the time of the 2011 Census only 11.5% of the population said that they could read, write or speak Welsh. Any impacts on the Welsh language will be addressed in the Integrated Sustainability Appraisal of the RLDP.

Active Travel (Wales) Act 2013

- 2.2.19 The Active Travel (Wales) Act aims to make active travel the most attractive option for shorter everyday journeys (journeys to work, school, to access shops or services, etc. i.e. not purely recreational). This Act states that “*Its purpose is to enable more people to undertake active travel, meaning more people can enjoy the benefits of active travel. We want to encourage people to leave their cars behind and use active travel where it is suitable for them to do so.*” Enabling more people to undertake active travel will mean more people can enjoy the health benefits of active travel, help reduce greenhouse emissions, tackle poverty and disadvantage and help our economy to grow.
- 2.2.20 The Act makes provision for the mapping of active travel routes and related facilities in connection with integrated network maps. It also requires local authorities in Wales to deliver year on year improvements in active travel routes and facilities to enhance opportunities for pedestrians and cyclists to make meaningful journeys without relying on the car. It requires highways authorities in Wales to make enhancements to routes and facilities for pedestrians and cyclists in all new road schemes and to have regard to the needs of walkers and cyclists in a range of other highway authority functions. It also requires the Welsh Ministers and local authorities to promote active travel journeys in exercising their functions under this Act. The principles of Active Travel are found throughout PPW 10, which stresses the need for the planning system to create an environment and infrastructure for people to walk and cycle.
- 2.2.21 Monmouthshire has prepared a series of Integrated Network Maps (INMs) which set out the Council’s plans for improving active travel routes in and around certain settlements over the next 15 years. At the time of preparation the guidance stated that the settlements should have had a population of at least 2,000 at the time of the 2001 Census. For Monmouthshire this included the settlements of Abergavenny, Caldicot, Chepstow, Magor Undy, Monmouth and Usk. However there are existing

active travel routes in smaller settlements which will need to be taken account of in this assessment.

- 2.2.22 The Integrated Network Maps produced show proposed future networks of key walking and cycling routes. Some of the routes shown will already be up to standard (i.e. those that are also included in the Existing Routes Maps), but many fall short of the Design Guidance standard. The maps include schemes for delivery in the next couple of years, schemes for delivery in the medium term (5-10 years), and longer-term (10-15 years) proposals of a more aspirational nature. The INMs were submitted to Welsh Government on 27 February 2018 and these have now been approved.

Development Plans Manual Edition 3 Consultation Draft (June 2019)

- 2.2.23 The Consultation Draft Development Plans Manual states that Local Planning Authorities should undertake a settlement assessment to inform decisions regarding where development should be spatially located to achieve a sustainable pattern of growth, minimise unsustainable patterns regarding the movement of people and support local services and facilities. The assessment should not be confined to the geographical boundaries of the LPA administrative boundary, but take account of the relationship settlements have with neighbouring areas. The range of topics to be considered as part of the settlement assessment is highlighted in diagram 1.
- 2.2.24 The Manual requires Local Planning Authorities to formulate a methodology for assessing the role and function of settlements which must be clearly set out in the evidence base. It should be transparent regarding how settlements are being assessed, the key assessment components and how this has been applied in a consistent manner across the area. This assessment should form the basis for the settlement hierarchy, identifying which settlements are most sustainable and have capacity to deliver growth.

Diagram 1: Settlement Assessment



Source: Development Plans Manual Edition 3 Consultation Draft (June 2019)

3. Methodology

3.1 The methodology used for this Sustainable Settlement Appraisal is based on the proposed approach set out in the draft South East Wales Strategic Planning Group (SEWSPG) Pathfinder Group Sustainable Settlement Appraisal Paper (SSAP) and has regard to the Consultation Draft Development Plans Manual. The SSAP seeks to set out a common methodology for sustainable settlement appraisals to be used across the South East Wales region². However, some elements of the methodology have been adapted to ensure that it is relevant to Monmouthshire as a predominantly rural county. If the proposed regional methodology were to be strictly adhered to, the settlement scores/weighting would be disproportionately low in Monmouthshire and skew the assessment. The application of a more flexible scoring approach to that proposed in the regional methodology is, therefore, considered necessary to take account of Monmouthshire's rural character. The differences between this and the SEWSPG methodology are set out and explained in Appendix 1.

² At March 2020, the SSAP is yet to be finalised and agreed.

Sustainable Settlement Appraisal Principles and Scoring Methodology

3.2 This section sets out the methodology used to assess a settlement's sustainability. A total of 55 settlements have been included in the appraisal. The settlements surveyed are those listed in Strategic Policy S1 of the current adopted Local Development Plan (2011-2021).

Settlements

Abergavenny	Llandegveth	Penallt
Bettws Newydd	Llandenny	Penpergwm
Broadstone/Catbrook	Llandogo	Penperlleni
Brynygwenin	Llanellen	Portskewett
Caldicot	Llanfoist	Pwllmeyric
Caerwent	Llangwm	Raglan
Chepstow	Llangybi	Rogiet
Coed-y-Paen	Llanishen	Shirenewton/Mynyddbach
Crick	Llanover	St Arvans
Cross Ash	Llansoy	Sudbrook
Cuckoo's Row	Llantilio Crossenny	The Narth
Devauden	Llantrisant	The Bryn
Dingestow	Llanvair Discoed	Tintern
Great Oak	Llanvair Kilgeddin	Tredunnoch
Grosmont	Llanvapley	Trellech
Gwehelog	Magor/Undy	Werngifford/Pandy
Little Mill	Mathern	Usk
Llanarth	Mitchel Troy	
Llanddewi Rhydderch	Monmouth	

3.3 In order to effectively assess the role and function of each individual settlement an audit of existing services and facilities was undertaken within each settlement during the autumn of 2018. This audit was based on the 3 principles set out below.

- Principle 1 – The level of sustainable transport and accessibility in and around settlements
- Principle 2 – The availability of local facilities and services in and around settlements
- Principle 3 – The level of employment opportunities in and around settlements

3.4 The assessment involved a combination of desk top survey work and site visits conducted by Planning Policy officers. The desk top study, using existing data such as the location of village halls, doctor's surgeries, post offices, playing fields, public rights of way, active travel routes, bus stops and employment opportunities, was used to establish a baseline of facilities and services that are known to be present within the settlements.

- 3.5 Once the baseline was established each settlement was visited and surveyed by Planning Policy officers where the presence of individual services/facilities was checked and recorded. Where possible, the information has been quality assured by the individual Town/Community Councils in which the settlements are located.
- 3.6 Each settlement was then assessed against a scoring system and ranked according to its overall score. This ranking provides an initial quantitative sustainability assessment which is limited to the measurable factors identified. This enables the identification of broad groupings of settlements with similar roles and functions.
- 3.7 There is also the potential to consider clusters of smaller settlements outside of the larger settlements which due to their population size and close geographical and functional links with the larger settlements recognises their sustainable location in terms of proximity to transport connections, employment and amenities. At the same time recognising that these settlements are smaller in scale and any proposed development should reflect this. The criteria used to identify settlements with the potential to form a cluster is discussed further below.

Scoring System

- 3.8 The scoring system is based upon the three principles set out above.

Principle 1: Sustainable Transport and Accessibility

- 3.9 Principle 1 focuses on sustainable transport and accessibility on the basis that its provision reduces the need to travel by car and enables access to a wider range of amenities by sustainable transport modes³. Settlements that are well connected via multi-modal forms of transport help increase the propensity for use of sustainable transport options for local residents to access a range of facilities including employment, health care, education and retail. In order to measure Principle 1, the following factors have been assessed:

- The presence of Active Travel Routes within the Settlement⁴
- Walking or cycling distance to a higher order settlement via an active travel route.⁵
- The frequency of public transport services within/ in proximity to a settlement⁶.
- Distance to a rail station. The distance is measured from a central address point within a settlement to the nearest rail station via the road network.

³ As stated at para 3.35 PPW10 (December 2018) recognises that in predominantly rural authorities such as Monmouthshire the opportunity to reduce car usage is limited but that some settlements will have good accessibility by non-car modes in comparison to the rural area as a whole.

⁴ These are based on the Integrated Network Maps produced by the Council and agreed by the Welsh Government as referred to in para 2.2.21 of this paper.

⁵ An active travel route in this instance is taken to be current footpaths and cycle routes between settlements.

⁶ The assessment takes into account the Grass Routes bus service as well as commercially operated services as many of the County's rural settlements, particularly in the north of the County, rely on this service

- A settlement’s proximity to a strategic highway network⁷. There must be a clear link to the network from the settlement. The distance is measured from a central address point within a settlement to the nearest point that a strategic highway can be joined.

Table 1: Scoring System for Sustainable Transport and Accessibility

Active Travel	
Presence of Active Travel Routes within the Settlement⁸	
Several Routes	10 points
One Route	5 points
No Routes	0 points
Walking distance to a higher order settlement via active travel route⁹	
1.5 miles	1 point
Cycling distance to a higher order settlement via active travel route¹⁰	
3.0 miles	1 point
Bus Services	
Bus stop	1 point
‘Turn up and go’ provision, frequency of approximately every 10 minutes	10 points
Medium frequency of service between 11 -30 minutes.	5 points
Low frequency of service between 31-60 minutes.	3 points
Daily frequency- less than hourly (at least one morning and one late afternoon service to a main centre).	2 points
Grass Routes Service	1 point
No Service	0 points
Rail Services¹¹	
Train station in Settlement	10 points
Less than 5 miles	5 points
Between 5 miles to 10 miles	1 point
Greater than 10 miles	0 points
Road Services	
Proximity to a strategic highway network¹²	
Less than 5 miles	5 points
Between 5 miles to 10 miles	1 point
Greater than 10 miles	0 points

3.10 It is important that a settlement has good accessibility to services and facilities helping communities to meet many of their everyday needs. Good access to

⁷ Criterion a. and b. of Policy MV9 – The Road Hierarchy of the adopted LDP detail those Strategic and County routes which comprise the strategic highway network for the purposes of this appraisal.

⁸ These are based on the Integrated Network Maps produced by the Council and agreed by the Welsh Government as referred to in para 2.2.21 of this paper.

⁹ As defined in the adopted LDP Strategic Policy S1 – The Spatial Distribution of New Housing Provision

¹⁰ As defined in the adopted LDP Strategic Policy S1 – The Spatial Distribution of New Housing Provision

¹¹ This is a measurement from the centre point of the settlement to the nearest railway station via the road network

¹² This is a measurement from the centre point of the settlement to the nearest strategic highway network as identified in LDP Policy MV9 – The Road Hierarchy via the local road network.

sustainable travel modes provides choice to the user and can reduce reliance on private cars for travel. Access to active travel routes and public transport also tackles an element of social exclusion enabling individuals who cannot drive or afford a car access to essential services and facilities. The presence of an active travel route within a settlement or between settlements helps to identify scope for meaningful walking and cycle journeys. Settlements that score well in this category have great potential to promote more active lifestyles. In Monmouthshire, as the definition of settlements for which Integrated Network Maps (INMs) are produced are those that had a population of over 2,000 at the time of the 2001 Census, only the main settlements have been mapped. These maps have been used to define the presence of existing active travel routes within these settlements whilst existing public rights of way and cycle routes have been used to establish the connectivity between settlements.

- 3.11 In terms of the average distances people are willing to walk or cycle to access everyday services, the Statutory Guidance for the Delivery of the Active Travel (Wales) Act 2013 says in section 2.3.3 that *“The integrated network will only need to stretch as far as people are willing to make journeys. Based on studies of travel patterns and commuting, most people prefer their regular journeys to be less than 45 minutes. This time period equates approximately to up to three miles by foot and ten miles by bicycle, assuming a person of average fitness and depending on factors such as gradient and terrain”*. In terms of the average distances considered within this appraisal these distances are interpreted as the maximum distance a person would be expected to travel.
- 3.12 When considering Monmouthshire’s Active Travel Integrated Network Maps, these include proposed cycle routes from Gilwern to Abergavenny (5.3 miles from Gilwern Library to Abergavenny rail station) and Chepstow to Caldicot (6-7 miles), both included following consultation comments. There is also clear evidence of pedestrian travel between Rogiet and Caldicot (2 miles from Severn Tunnel Junction station to Caldicot Cross) and an identified need to secure provision of a cycle footpath between Rogiet and Undy (also about 2 miles). Walking and cycling statistics for England from 2016 suggest average trip lengths of 3.5 miles for cycling and 0.8 miles for walking. Given that there does not appear to be a definitive distance that people are willing to travel to access services this appraisal has used a conservative distance of 1.5 miles for walking and 3 miles for cycling.
- 3.13 Bus services represent an important mode of public transport within Monmouthshire. The scoring system recognises five categories of bus services including the Grass Routes service as many of the County’s rural settlements, particularly in the north of the County, rely on this service. This service is a Community Transport scheme which offers a ‘ring and request’ service for all residents who register. Whilst not as extensive as traditional bus operations it is considered that this flexible on demand service provides an important contribution towards rural accessibility in Monmouthshire.

- 3.14 The scoring system also recognises distances to rail services, unlike bus services, few of the County’s settlements benefit from a railway station. There are currently four rail stations located at Chepstow, Caldicot, Severn Tunnel Junction and Abergavenny and access to these, preferably by sustainable transport means, is important in accessing the wider region. With the exception of Caldicot all of these stations make provision for parking to allow for multi-modal trips, with both Chepstow and Abergavenny providing for bus-rail interconnectivity as well. The appraisal has also taken account of access to railway stations outside of the administrative boundary if these are closer to a settlement, for example the railway station at New Inn in Torfaen.
- 3.15 Another consideration under this principle is the proximity to a strategic highway network as this is important in the rural context and reflects the inter-connectedness of each settlement by road. A strategic highway for the purposes of this appraisal are those listed in criteria a. and b. of Policy MV9 – The Road Hierarchy of the adopted LDP. This helps in the assessment of the links between residential areas, employment centres and other areas both within and outside the immediate boundary of the County.

Principle 2: Availability of Facilities and Services

- 3.16 Principle 2 considers the ability of a settlement to provide for the daily needs of residents by assessing the availability of services and facilities by quantity and variety, including digital connectivity. Digital connectivity is becoming increasingly important to consider both in the context of wider settlement connectivity and the fact that Monmouthshire has higher levels of those in employment who work at home (35%) compared to the Welsh average of 11.9%¹³. Cultural and technological improvements mean that these proportions are likely to have increased since 2011.
- 3.17 The availability of facilities and services within a settlement impacts on the need for residents of a settlement to travel to access facilities/services and gives an indication as to whether the current provision of facilities/services can support its current and future population. In order to assess Principle 2, each settlement has been analysed in terms of the range of services and facilities on offer. These include those given in the table below:

Table 2: Scoring System for Availability of Facilities and Services

Service/Facility	Score
Presence of Retail Centre within or near Settlement	
Town Centre ¹⁴	20 points
Local Centre ¹⁵	10 points
Neighbourhood Centre ¹⁶	5 points

¹³ 2011 Census

¹⁴ As defined in the adopted LDP Policy S6 – Retail Hierarchy

¹⁵ As defined in the adopted LDP Policy S6 – Retail Hierarchy

¹⁶ As defined in the adopted LDP Policy S6 – Retail Hierarchy

Service/Facility	Score	
Proximity to a Town or Local centre¹⁷		
Less than 5 miles	2 points	
Between 5 miles to 10 miles	1 point	
Greater than 10 miles	0 points	
Regular Needs		
Convenience Store	more than 3 of each service/facility = 3 points 2 to 3 of each service/facility = 2 points 1 of each service/facility = 1 point	
Other non-food Shop		
Post Office		
Bank		
Petrol Filling Station		
Community Facilities		
Public Hall (including village hall & church hall)		
Library		
Place of Worship		
Publicly Accessible Open Space		
Sports Ground (pitch available)		
Child's Play Area		
Youth Club (including scout & guide groups)		
Medical Facilities		
Hospital		
GP Surgery		
Pharmacy		
Dentist		
Education Facilities		
Nursery School/Playgroup/Toddler Group		
Primary School		
Secondary School/Further Education College		
Cafes, Bars, Pubs, Restaurants & Takeaways		
Public House		
Tea/coffee Shop/café/restaurant/takeaway		
Broadband Connection¹⁸		
Broadband Connectivity	5 points	
High median download speed of >30 Mb/s	2 points	
Moderate median download speed of between 24-30 Mb/s	1 point	
Low median download speed of <24 Mb/s	0 points	
No Broadband Connectivity	0 points	

3.18 The existence of these services within or in close proximity to settlements can significantly reduce commuting distances associated with a range of important daily

¹⁷ This is a measurement from the centre point of the settlement to the nearest retail centre via the local road network.

¹⁸ Average fixed-line broadband speed by postcode and by output area, 2017 data released by Ofcom. Accessed 30.05.19 <https://data.cdrc.ac.uk/dataset/broadband-speed#>

activities, thereby reducing the need and likelihood of travelling by private car. Furthermore, sustainable settlements or clusters of settlements around larger settlements should offer a reasonable range of key services and facilities, albeit there is no certainty that these local services and facilities are taken up by local residents.

Principle 3: Employment Opportunities

- 3.19 Principle 3 relates to the location of employment opportunities in or around a settlement. This gives an indication of the economic sustainability of an area, including the ability/potential to reduce the need to travel to work. In order to assess Principle 3, as well as taking account of protected and identified employment sites as listed in Policies SAE1 and SAE2 of the adopted LDP, consideration has been given to the presence of an employment use/opportunity within the current settlement boundary, or in close proximity to a settlement. For the purposes of this appraisal only traditional B1/B2 uses have been looked at as it is difficult to establish whether other uses, such as village shops, are staffed by paid employees or volunteers.

Table 3: Scoring System for Employment Opportunities

Employment Opportunity	
Protected Employment Site within settlement ¹⁹	20 points
Identified Business/Industrial Sites or Mixed-Use Sites within settlement ²⁰	20 points
Other Employment Opportunity (B1/B2 use) within settlement	10 point
Proximity to Protected/Identified Employment Site if not within the settlement²¹	
Less than 5 miles	10 points
Between 5 miles to 10 miles	5 points
Greater than 10 miles	0 points

- 3.20 Local employment opportunities provide a positive indicator of vibrant sustainable communities. Whilst it is recognised that there is no certainty that local residents will be employed in these, it is nevertheless important that these opportunities exist to promote sustainable travel patterns.
- 3.21 Whilst the above principles consider the current provision of services and facilities and employment opportunities within and around settlements, it is also important to recognise that enabling an appropriate level of growth in a settlement can generate wealth, support existing and facilitate the provision of new facilities/services and therefore help to sustain communities, as recognised in national planning policy.
- 3.22 To supplement this initial analysis once a hierarchy of settlements is established by applying the 3 principles above further analysis looks at the role and function of the smaller settlements relating to their location and relationship with larger

¹⁹ As defined in the adopted LDP Strategic Policy SAE2 – Protected Employment Sites.

²⁰ As defined in the adopted LDP Strategic Policy SAE1 – Identified Industrial and Business Sites.

²¹ The distance is measured from a central address point within a settlement to the centre of the nearest employment site via the road network.

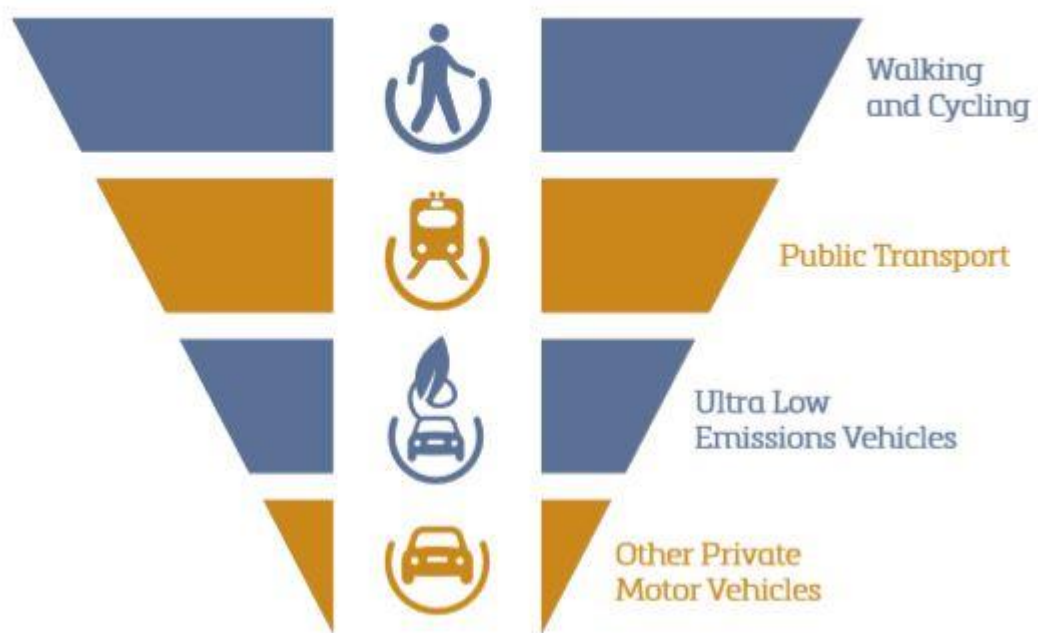
settlements using the criteria at paragraph 3.27 below. This includes the relationship with other surrounding areas within the neighbouring authorities. This additional analysis recognises that outside of the larger settlements are a wide range of smaller settlements which offer a more limited but important range of key services and facilities. These settlements make an important contribution to the social, economic and environmental fabric of the County and play an important role in enabling resilient and sustainable communities. These settlements can often form part of a collection of settlements which have close geographical and functional links with larger settlements. An analysis of the possible clusters is included at section 9 of this appraisal.

Weighting

3.23 The scoring matrices set out above reflect the role sustainable transport/accessibility, employment and key services and facilities play in meeting the resident population’s daily needs and the need to reduce travel distances to access services and facilities. Based on this each principle is weighted to reflect their importance to the sustainability of settlements. PPW10 (para 4.1.8) confirms the Welsh Government’s commitment to reducing reliance on the private car and supporting a modal shift to walking, cycling and public transport. It is Welsh Government policy to require the use of a sustainable transport hierarchy in relation to new development as shown in the diagram below.

Diagram 2: The Sustainable Transport Hierarchy for Planning

Figure 8: The Sustainable Transport Hierarchy for Planning



Source: Planning Policy Wales Edition 10 (December 2018)

- 3.24 To reflect this commitment to sustainable transport and accessibility the criteria for Principle 1 – Sustainable Transport and Accessibility represents 40% of the overall score with the remaining criteria under Principle 2 and 3 having an overall score of 30% each. Thus the maximum score that can be achieved for a settlement against the 3 principles is 100%.

Population Size

- 3.25 The Consultation Draft Development Plan Manual recommends (diagram 1) that the size of a settlement be taken into account in the settlement assessment. In order to do this as part of this appraisal once the 3 principles have been scored and weighted for each settlement, additional points have been given to settlements based on their population size.

Table 4: Scoring System for Population Size

Population Size	Score
>10000	50 Points
5000 - 9999	30 Points
1500 - 4999	20 Points
500 - 1499	10 Points
250 - 499	5 Points
100 - 249	1 Points
<100	0 Points

- 3.26 Up to date official population figures for each settlement are not available at the lower geographical scale used within this settlement appraisal. For the purposes of the appraisal, population figures for the smaller settlements are derived from best possible estimates using counts of dwellings which fall within the development boundary of a settlement, as defined in the adopted LDP, where this exists, or counts of dwellings which make up a nucleus of a settlement. The average household size figure from the 2011 Census for the output area in which the settlement is located has then been applied to the dwelling count. For the larger settlements the population figures from the 2011 Census have been used as the starting point. Completions data from the Annual Joint Housing Land Availability Studies has then been added to this and the same process used as for the smaller settlements to estimate the additional population arising from these additional dwellings.

Cluster Criteria

- 3.27 PPW 10 (para 3.36) states that “Local service centres, or clusters of smaller settlements where a sustainable functional linkage can be demonstrated, should be designated by local authorities as the preferred locations for most new development including housing and employment provision.” There are several criteria which are considered appropriate to identify settlements within the county with the potential to form a cluster:

- Identified as a settlement in Strategic Policy S1 of the adopted Local Development Plan;
- The main settlement within the cluster should be a Tier 1 settlement²² based on the 3 principles and settlement size;
- The cluster should contain Settlements from Tiers 1 to 4.
- Smaller settlements within the cluster should achieve a score of 25% or above based on the 3 principles and settlement size;
- Smaller settlements within the cluster should have a functional link with a Tier 1 settlement via a bus route into or adjacent to the settlement;
- Smaller settlements within the cluster should have a functional link with a Tier 1 settlement via an active travel route option, either walking or cycling; and
- Smaller settlements within the cluster should have a functional link with a Tier 1 settlement with regard to its proximity via the road network.

3.28 Where settlements meet the above criteria and have the ability to form a cluster, these settlements may be considered as locations for new development, despite their position within the settlement hierarchy. Any such development will need to be acceptable in planning terms, however, and balanced against the physical/environmental and infrastructure constraints of individual settlements and their ability to accommodate additional development given the sensitivity of landscapes, the countryside character of rural settlements and existing residential amenity.

4. Contextual Information

4.1 As part of this appraisal and in order to establish a detailed profile of the characteristics of Monmouthshire’s settlements and allow for further comparisons to be made between them, contextual information is included for each settlement. The table below identifies the information that has been collected for each settlement and provides a brief explanation of the reasons for collecting this information.

Table 5: Contextual information

Settlement area (ha)	Used to give an indication of the physical size of the settlement.
Population size	Used to give an indication of how many people live in each settlement and therefore how many people the settlement has to directly support.
Age structure	Used to give an indication of the different age ranges in each settlement and if there is a concentration of one age group. This may help to indicate the types of services which are needed.

²² A Tier 1 settlement are those settlements which have achieved a high score against the 3 principles and with regard to their population size. For the purposes of this study this is those settlements which have scored above 70%.

Economically active (%)	Used to show what proportion of the local community are eligible to work and also what proportion are dependent.
Employed (%)	Used to show what proportion of the local population have a job.
Number and type of local jobs	Used to show the level and diversity of local employment available.
Self-Containment	Used to show the number of people who live and work in the same settlement, minimising the need to travel, and where travel is required, increasing the potential for sustainable travel.
Travel to work flows	Used to help give an indication of how many local people travel out of their home settlement to go to work. This will help to show which settlements are considered to be more dormitory in nature.
Households	Used to help give an indication of the size and type of households in each settlement
Average house prices (£)	Used to help give an indication of the affordability of each settlement.
House price to income ratio	Used to help give an indication of the affordability of each settlement.
Affordable Housing Need	Used to help give an indication of the need for affordable housing in each settlement.

- 4.2 In order to collect this data in a consistent way it is important to define the settlements in terms of their statistical geographies. For the smaller settlements where a low level geography is needed, output area data (OA) from the 2011 Census and Nomis has been used where this is available; OAs have a minimum size of 100 residents and 50 households. For the three main towns, Lower Super Output Areas (LSOA) have been aggregated to create functional settlement areas. LSOAs have a minimum size of 1000 residents and 500 households. The OA and LSOA settlement groupings are included at Appendix 2.
- 4.3 A profile for each settlement is included at Appendix 3. Each of the profiles includes the contextual information identified in table 4 above together with the full results from the survey of services and facilities.

Sustainable Settlements Assessment

5. Initial Ranking of Settlements based on the 3 Principles

- 5.1 The Development Plans Manual Edition 3 Consultation Draft (June 2019) recommends that LPAs should consider the most practicable way of presenting the results of the settlement assessments, such as a scoring system, or RAG (Red, Amber, and Green) analysis with this assessment forming the basis for the settlement hierarchy, identifying which settlements are most sustainable and have capacity to deliver growth. For this appraisal a scoring system has been used to undertake the

initial assessment of the settlements. Table 6 below shows the total score achieved by each settlement against the 3 principles.

Table 6: Total Score Achieved by Settlement against the 3 Principles

Settlement	Total	Principle 1: Transport Services/Accessibility	Principle 2: Community services & facilities	Principle 3: Employment Opportunity
Chepstow	151	29	72	50
Caldicot	148	29	69	50
Abergavenny	147	29	68	50
Monmouth	134	18	66	50
Magor Undy	116	24	42	50
Usk	112	19	43	50
Llanfoist	79	25	24	30
Raglan	74	19	35	20
Rogiet	73	29	24	20
Caerwent	70	25	25	20
Penperlleni	65	19	26	20
Tintern	51	10	26	15
Portskewett	51	15	26	10
The Bryn	46	13	13	20
St Arvans	46	15	21	10
Crick	43	16	7	20
Devauden	42	9	18	15
Mathern	41	12	19	10
Penpergwm	40	13	7	20
Little Mill	40	15	15	10
Shirenewton/Mynyddbach	39	10	24	5
Cuckoo's Row	38	11	7	20
Llanellen	38	15	13	10
Llanover	37	14	13	10
Sudbrook	35	11	14	10
Dingestow	34	8	16	10
Pwllmeyric	33	16	7	10
Llanvair Discoed	33	11	12	10
Llangybi	33	9	14	10
Llanishen	32	5	12	15
Penallt	32	8	14	10
Llanvapley	32	11	11	10
Llandogo	31	9	17	5
Gwehelog	31	11	10	10
Werngifford/Pandy	30	9	16	5
Coed-y-Paen	30	11	9	10
Llanddewi Rhydderch	29	7	12	10

Settlement	Total	Principle 1: Transport Services/Accessibility	Principle 2: Community services & facilities	Principle 3: Employment Opportunity
Trellech	29	8	16	5
Mitchel Troy	28	8	10	10
Brynygwenin	28	11	7	10
Llangwm	27	8	9	10
Great Oak	26	9	7	10
Llandenny	26	6	10	10
Llantrisant	26	7	9	10
Llandegveth	25	11	9	5
The Narth	24	8	11	5
Llanarth	22	5	12	5
Llansoy	20	7	8	5
Grosmont	20	6	14	0
Cross Ash	20	3	12	5
Llanvair Kilgeddin	19	7	7	5
Broadstone/Catbrook	19	3	11	5
Bettws Newydd	17	3	9	5
Llantilio Crossenny	15	3	7	5
Tredunnoch	15	3	7	5

5.2 It is clear from table 6, that as expected, the main towns of Abergavenny, Caldicot, Chepstow and Monmouth score most highly against the 3 principles. This reflects their role as service and employment centres and transport hubs for their rural hinterlands. Outside of the main towns there are two further settlements which score well, Usk and Magor Undy. Usk, whilst not offering the full range of services and facilities as the main towns, also acts as a hub for its surrounding rural hinterland. Magor Undy serves a slightly different purpose as whilst it does not benefit from the level of services found in Usk it is well placed to benefit from its location on the M4 corridor and its proximity to both local and regional employment opportunities.

5.3 Following the initial scoring of the settlements against the 3 principles, the scores have been weighted to reflect the importance of transport services and accessibility to the sustainability of settlements, with the maximum percentage achievable for principle 1 being 40% and principles 2 and 3 30% respectively. The scores achieved by each settlement against each of the three principles are set out in the tables below, with the final column showing the weighted percentage achieved by each settlement. The settlements are ranked by this weighted score in each of the tables with those settlements scoring the highest at the top.

Principle 1 - Sustainable Transport and Accessibility

- 5.4 It is clear from table 7 that there is a wide disparity between the settlements across the County in terms of their sustainable transport links and accessibility. The top scoring four settlements, Abergavenny, Caldicot, Chepstow and Rogiet are all multi-modal transport hubs that benefit from active travel routes, existing railway stations and frequent bus services. They are also well placed geographically to take advantage of the strategic road network in the County. Outside of this initial group of settlements there are a number of settlements that score 20% or above against this principle despite lacking a train station due to their comparable strength in the other categories. These settlements are Llanfoist, Magor Undy, Caerwent, Penperlleni, Raglan, Usk and Monmouth.
- 5.5 There is a secondary group of settlements who score less well, between 10% and 20%, reflecting their lower levels of sustainable transport links and accessibility, particularly with regard to active travel routes although they are within relative proximity to rail stations and the strategic highway network. The final group score poorly against this principle indicating their low levels of sustainable transport links and accessibility.

Table 7: Principle 1 - Sustainable Transport and Accessibility

Settlement	Active Travel	Score	Bus Services	Score	Rail Services	Score	Proximity to Strategic Highway Network	Score	Weighted Score % (Maximum achievable 40%)
Abergavenny	Several Routes	10	31 – 60 minutes	4	Rail station in settlement	10	Less than 5 miles	5	32.2%
Caldicot	Several Routes	10	31 – 60 minutes	4	Rail station in settlement	10	Less than 5 miles	5	32.2%
Chepstow	Several Routes	10	31 – 60 minutes	4	Rail station in settlement	10	Less than 5 miles	5	32.2%
Rogiet	Several Routes	10	31 – 60 minutes	4	Rail station in settlement	10	Less than 5 miles	5	32.2%
Llanfoist	Several Routes	11	31 – 60 minutes	4	Less than 5 miles	5	Less than 5 miles	5	27.8%
Caerwent	Several Routes	11	31 – 60 minutes	4	Less than 5 miles	5	Less than 5 miles	5	27.8%
Magor Undy	Several Routes	10	31 – 60 minutes	4	Less than 5 miles	5	Less than 5 miles	5	26.7%
Penperlleni	One Route	5	31 – 60 minutes	4	Less than 5 miles	5	Less than 5 miles	5	21.1%
Raglan	Several Routes	10	>60 minutes	3	5 – 10 miles	1	Less than 5 miles	5	21.1%
Usk	Several Routes	10	>60 minutes	3	5 – 10 miles	1	Less than 5 miles	5	21.1%
Monmouth	Several Routes	10	>60 minutes	3	Greater than 10 miles	0	Less than 5 miles	5	20.0%
Crick	More than one PROW or Cycle Path	2	31 – 60 minutes	4	Less than 5 miles	5	Less than 5 miles	5	17.8%

Settlement	Active Travel	Score	Bus Services	Score	Rail Services	Score	Proximity to Strategic Highway Network	Score	Weighted Score % (Maximum achievable 40%)
Pwllmeyric	More than one PROW or Cycle Path	2	31 – 60 minutes	4	Less than 5 miles	5	Less than 5 miles	5	17.8%
Little Mill	More than one PROW or Cycle Path	2	>60 minutes	3	Less than 5 miles	5	Less than 5 miles	5	16.7%
Llanellen	PROW or Cycle Path	1	31 – 60 minutes	4	Less than 5 miles	5	Less than 5 miles	5	16.7%
Portskewett	PROW or Cycle Path	1	31 – 60 minutes	4	Less than 5 miles	5	Less than 5 miles	5	16.7%
St Arvans	PROW or Cycle Path	1	31 – 60 minutes	4	Less than 5 miles	5	Less than 5 miles	5	16.7%
Llanover	No Routes	0	31 – 60 minutes	4	Less than 5 miles	5	Less than 5 miles	5	15.6%
Penpergwm	No Routes	0	>60 minutes	3	Less than 5 miles	5	Less than 5 miles	5	14.4%
The Bryn	No Routes	0	>60 minutes	3	Less than 5 miles	5	Less than 5 miles	5	14.4%
Mathern	PROW or Cycle Path	1	Grass Routes Service	1	Less than 5 miles	5	Less than 5 miles	5	13.3%
Brynygwenin	No Routes	0	Grass Routes Service	1	Less than 5 miles	5	Less than 5 miles	5	12.2%
Coed-y-Paen	No Routes	0	Grass Routes Service	1	Less than 5 miles	5	Less than 5 miles	5	12.2%

Settlement	Active Travel	Score	Bus Services	Score	Rail Services	Score	Proximity to Strategic Highway Network	Score	Weighted Score % (Maximum achievable 40%)
Cuckoo's Row	More than one PROW or Cycle Path	2	>60 minutes	3	5 – 10 miles	1	Less than 5 miles	5	12.2%
Gwehelog	PROW or Cycle Path	1	31 – 60 minutes	4	5 – 10 miles	1	Less than 5 miles	5	12.2%
Llandegveth	No Routes	0	Grass Routes Service	1	Less than 5 miles	5	Less than 5 miles	5	12.2%
Llanvair Discoed	No Routes	0	Grass Routes Service	1	Less than 5 miles	5	Less than 5 miles	5	12.2%
Llanvapley	No Routes	0	Grass Routes Service	1	Less than 5 miles	5	Less than 5 miles	5	12.2%
Sudbrook	No Routes	0	Grass Routes Service	1	Less than 5 miles	5	Less than 5 miles	5	12.2%
Shirenewton/Mynyddbach	PROW or Cycle Path	1	>60 minutes	3	5 – 10 miles	1	Less than 5 miles	5	11.1%
Tintern	No Routes	0	31 – 60 minutes	4	5 – 10 miles	1	Less than 5 miles	5	11.1%
Devauden	No Routes	0	>60 minutes	3	5 – 10 miles	1	Less than 5 miles	5	10.0%
Great Oak	No Routes	0	>60 minutes	3	5 – 10 miles	1	Less than 5 miles	5	10.0%
Llandogo	No Routes	0	>60 minutes	3	5 – 10 miles	1	Less than 5 miles	5	10.0%
Llangybi	No Routes	0	>60 minutes	3	5 – 10 miles	1	Less than 5 miles	5	10.0%

Settlement	Active Travel	Score	Bus Services	Score	Rail Services	Score	Proximity to Strategic Highway Network	Score	Weighted Score % (Maximum achievable 40%)
Werngifford/Pandy	No Routes	0	>60 minutes	3	5 – 10 miles	1	Less than 5 miles	5	10.0%
Dingestow	No Routes	0	>60 minutes	3	Greater than 10 miles	0	Less than 5 miles	5	8.9%
Llangwm	No Routes	0	>60 minutes	3	Greater than 10 miles	0	Less than 5 miles	5	8.9%
Mitchel Troy	No Routes	0	>60 minutes	3	Greater than 10 miles	0	Less than 5 miles	5	8.9%
Penallt	No Routes	0	>60 minutes	3	Greater than 10 miles	0	Less than 5 miles	5	8.9%
The Narth	No Routes	0	>60 minutes	3	Greater than 10 miles	0	Less than 5 miles	5	8.9%
Trellech	No Routes	0	>60 minutes	3	Greater than 10 miles	0	Less than 5 miles	5	8.9%
Llanddewi Rhydderch	No Routes	0	Grass Routes Service	1	5 – 10 miles	1	Less than 5 miles	5	7.8%
Llansoy	No Routes	0	Grass Routes Service	1	5 – 10 miles	1	Less than 5 miles	5	7.8%
Llantrisant	No Routes	0	Grass Routes Service	1	5 – 10 miles	1	Less than 5 miles	5	7.8%
Llanvair Kilgeddin	No Routes	0	Grass Routes Service	1	5 – 10 miles	1	Less than 5 miles	5	7.8%
Grosmont	No Routes	0	Grass Routes Service	1	Greater than 10 miles	0	Less than 5 miles	5	6.7%
Llandenny	No Routes	0	Grass Routes Service	1	Greater than 10 miles	0	Less than 5 miles	5	6.7%

Settlement	Active Travel	Score	Bus Services	Score	Rail Services	Score	Proximity to Strategic Highway Network	Score	Weighted Score % (Maximum achievable 40%)
Llanarth	No Routes	0	>60 minutes	3	5 – 10 miles	1	5 – 10 miles	1	5.6%
Llanishen	No Routes	0	>60 minutes	3	5 – 10 miles	1	5 – 10 miles	1	5.6%
Bettws Newydd	No Routes	0	Grass Routes Service	1	5 – 10 miles	1	5 – 10 miles	1	3.3%
Broadstone/Catbrook	No Routes	0	Grass Routes Service	1	5 – 10 miles	1	5 – 10 miles	1	3.3%
Cross Ash	PROW or Cycle Path	1	Grass Routes Service	1	Greater than 10 miles	0	5 – 10 miles	1	3.3%
Llantilio Crossenny	No Routes	0	Grass Routes Service	1	5 – 10 miles	1	5 – 10 miles	1	3.3%
Tredunnoch	No Routes	0	Grass Routes Service	1	5 – 10 miles	1	5 – 10 miles	1	3.3%

Principle 2 – Availability of Facilities and Services

- 5.6 The extent and range of retail, community and service facilities in a settlement is a good indication of its socio-economic sustainability. All facilities and services are important to differing degrees, with significant clusters of such services having a strong bearing on the position of settlements within the hierarchy. The availability of Town, Local and Neighbourhood Centres within settlements are therefore scored most highly, with other facilities and services only being scored if they are within a settlement but outside one of these designations. For the purposes of this assessment the services and facilities have been scored equally in view of the difficulty in developing an objective measure, when the relative importance of facilities will depend on the particular combination of circumstances in each settlement i.e. the presence of a convenience store in a settlement will score the same as the presence of a public hall.
- 5.7 It is clear from table 8, that as expected, the towns of Abergavenny, Caldicot, Chepstow and Monmouth with their town and neighbourhood centres score most highly against this principle. This reflects the level and diversity of facilities available which are required to serve the most populated areas of the County and reaffirms their role as service hubs for their rural hinterlands.
- 5.8 Outside of the main towns Usk, Magor Undy and Raglan also rank well with their local centres offering services of a more local nature aimed at meeting the daily needs of their inhabitants and those living in the surrounding areas. Outside of these settlements are a large number of smaller settlements with a limited offer in terms of services and facilities. However, it is recognised that many will be linked to higher order settlements via active travel and transport links as evidenced by their total scores against all 3 principles and the cluster analysis.

Table 8: Principle 2 -Availability of Facilities and Services

Settlement	Presence of Retail Centre within or near settlement	Score	Regular Needs Maximum Score	Score	Community Facilities Maximum Score	Score	Medical Facilities Maximum Score	Score	Education Facilities Maximum Score	Score	Cafes, Bars, Pubs, Restaurants & Takeaways Maximum Score	Score	Broadband Connection	Score	Weighted Score % (Maximum achievable 30%)
Chepstow	Town & Neighbourhood Centres	25	15	4	21	19	12	6	9	7	6	6	<24Mb/s	5	22.7
Caldicot	Town & Neighbourhood Centres	25	15	4	21	19	12	3	9	7	6	6	<24Mb/s	5	21.8
Abergavenny	Town & Neighbourhood Centres	25	15	4	21	16	12	7	9	7	6	4	<24Mb/s	5	21.5
Monmouth	Town & Neighbourhood Centres	25	15	3	21	15	12	6	9	8	6	4	<24Mb/s	5	20.8
Usk	Local Centre	10	15	2	21	16	12	3	9	4	6	3	<24Mb/s	5	13.6
Magor Undy	Local Centre	10	15	1	21	15	12	3	9	4	6	3	24-30Mb/s	6	13.3
Raglan	Local Centre	10	15	1	21	10	12	1	9	3	6	4	24-30Mb/s	6	11.0
Penperlleni	5 – 10 miles	1	15	2	21	10	12	1	9	3	6	2	>30Mb/s	7	8.2
Portskewett	Less than 5 miles	2	15	2	21	11	12	2	9	1	6	1	>30Mb/s	7	8.2
Tintern	5 – 10 miles	1	15	4	21	7	12	1	9	1	6	6	24-30Mb/s	6	8.2
Caerwent	Less than 5 miles	2	15	2	21	14	12	0	9	1	6	1	<24Mb/s	5	7.9
Llanfoist	Less than 5 miles	2	15	3	21	9	12	1	9	2	6	2	<24Mb/s	5	7.6
Rogiet	Less than 5 miles	2	15	4	21	8	12	0	9	3	6	2	<24Mb/s	5	7.6
Shirenewton/Mynyddbach	Less than 5 miles	2	15	0	21	11	12	0	9	2	6	2	>30Mb/s	7	7.6
St Arvans	Less than 5 miles	2	15	2	21	7	12	0	9	2	6	1	>30Mb/s	7	6.6
Mathern	Less than 5 miles	2	15	0	21	8	12	0	9	1	6	1	>30Mb/s	7	6.0
Devauden	5 – 10 miles	1	15	3	21	8	12	0	9	1	6	0	<24Mb/s	5	5.7
Llandogo	5 – 10 miles	1	15	1	21	5	12	0	9	2	6	1	>30Mb/s	7	5.4
Dingestow	Less than 5 miles	2	15	2	21	6	12	0	9	1	6	0	<24Mb/s	5	5.0
Trellech	5 – 10 miles	1	15	1	21	5	12	1	9	2	6	1	<24Mb/s	5	5.0
Werngifford/Pandy	5 – 10 miles	1	15	0	21	7	12	0	9	1	6	2	<24Mb/s	5	5.0

Settlement	Presence of Retail Centre within or near settlement	Score	Regular Needs Maximum Score	Score	Community Facilities Maximum Score	Score	Medical Facilities Maximum Score	Score	Education Facilities Maximum Score	Score	Cafes, Bars, Pubs, Restaurants & Takeaways Maximum Score	Score	Broadband Connection	Score	Weighted Score % (Maximum achievable 30%)
Little Mill	Less than 5 miles	2	15	0	21	7	12	0	9	0	6	1	<24Mb/s	5	4.7
Llangybi	Less than 5 miles	2	15	0	21	4	12	0	9	0	6	1	>30Mb/s	7	4.4
Penallt	Less than 5 miles	2	15	0	21	5	12	0	9	0	6	2	<24Mb/s	5	4.4
Sudbrook	Less than 5 miles	2	15	1	21	6	12	0	9	0	6	0	<24Mb/s	5	4.4
Grosmont	Greater than 10 miles	0	15	2	21	5	12	0	9	0	6	1	24-30Mb/s	6	4.4
Llanellen	Less than 5 miles	2	15	0	21	5	12	0	9	0	6	0	24-30Mb/s	6	4.1
Llanover	Less than 5 miles	2	15	1	21	4	12	0	9	1	6	0	<24Mb/s	5	4.1
The Bryn	Less than 5 miles	2	15	1	21	5	12	0	9	0	6	0	<24Mb/s	5	4.1
Cross Ash	5 – 10 miles	1	15	0	21	4	12	0	9	2	6	0	<24Mb/s	5	3.8
Llanarth	Less than 5 miles	2	15	0	21	5	12	0	9	0	6	0	<24Mb/s	5	3.8
Llanddewi Rhydderch	Less than 5 miles	2	15	0	21	5	12	0	9	0	6	0	<24Mb/s	5	3.8
Llanishen	5 – 10 miles	1	15	0	21	4	12	0	9	1	6	1	<24Mb/s	5	3.8
Llanvair Discoed	5 – 10 miles	1	15	0	21	3	12	0	9	0	6	1	>30Mb/s	7	3.8
Broadstone/Catbrook	5 – 10 miles	1	15	0	21	5	12	0	9	0	6	0	<24Mb/s	5	3.5
Llanvapley	Less than 5 miles	2	15	0	21	4	12	0	9	0	6	0	<24Mb/s	5	3.5
The Narth	5 – 10 miles	1	15	0	21	3	12	0	9	1	6	1	<24Mb/s	5	3.5
Gwehelog	Less than 5 miles	2	15	0	21	2	12	0	9	0	6	1	<24Mb/s	5	3.2
Llandenny	Less than 5 miles	2	15	0	21	2	12	0	9	0	6	1	<24Mb/s	5	3.2
Mitchel Troy	Less than 5 miles	2	15	0	21	2	12	0	9	1	6	0	<24Mb/s	5	3.2
Bettws Newydd	5 – 10 miles	1	15	0	21	2	12	0	9	0	6	1	<24Mb/s	5	2.9
Coed-y-Paen	Less than 5 miles	2	15	0	21	1	12	0	9	0	6	1	<24Mb/s	5	2.9
Llandegveth	Less than 5 miles	2	15	0	21	1	12	0	9	0	6	1	<24Mb/s	5	2.9

Settlement	Presence of Retail Centre within or near settlement	Score	Regular Needs Maximum Score	Score	Community Facilities Maximum Score	Score	Medical Facilities Maximum Score	Score	Education Facilities Maximum Score	Score	Cafes, Bars, Pubs, Restaurants & Takeaways Maximum Score	Score	Broadband Connection	Score	Weighted Score % (Maximum achievable 30%)
Llangwm	Less than 5 miles	2	15	0	21	2	12	0	9	0	6	0	<24Mb/s	5	2.9
Llantrisant	Less than 5 miles	2	15	0	21	1	12	0	9	0	6	1	<24Mb/s	5	2.9
Llansoy	5 – 10 miles	1	15	0	21	1	12	0	9	0	6	1	<24Mb/s	5	2.5
Brynygwenin	Less than 5 miles	2	15	0	21	0	12	0	9	0	6	0	<24Mb/s	5	2.2
Crick	Less than 5 miles	2	15	0	21	0	12	0	9	0	6	0	<24Mb/s	5	2.2
Cuckoo's Row	Less than 5 miles	2	15	0	21	0	12	0	9	0	6	0	<24Mb/s	5	2.2
Great Oak	Less than 5 miles	2	15	0	21	0	12	0	9	0	6	0	<24Mb/s	5	2.2
Llantilio Crossenny	5 – 10 miles	1	15	0	21	1	12	0	9	0	6	0	<24Mb/s	5	2.2
Llanvair Kilgeddin	5 – 10 miles	1	15	0	21	1	12	0	9	0	6	0	<24Mb/s	5	2.2
Penpergwm	Less than 5 miles	2	15	0	21	0	12	0	9	0	6	0	<24Mb/s	5	2.2
Pwllmeyric	Less than 5 miles	2	15	0	21	0	12	0	9	0	6	0	<24Mb/s	5	2.2
Tredunnoch	5 – 10 miles	1	15	0	21	1	12	0	9	0	6	0	<24Mb/s	5	2.2

Principle 3 – Employment Opportunities

- 5.9 Local employment opportunities provide a positive indicator of a settlement's vibrancy and sustainability, especially if there is a significant range of opportunities available. Whilst there is no guarantee that these opportunities will be taken up by local residents it is important to understand the possible employment opportunities available in each settlement to gauge capacity for sustainable growth. Such availability can reduce the need for residents to travel and provide the opportunity to work closer to home thus reducing levels of commuting.
- 5.10 The 2017 Business Register and Employment Survey (BRES) conducted by the Office for National Statistics is the official source of employee estimates by detailed geography and broad industry and whilst these figures have been included within the analysis for this principle they have not been used as part of the scoring system. The reason for this is that the data does not go down to a low enough geography for the County's smaller settlements. The lowest geography for which data is available is LSOA level and at this level an LSOA could include a number of settlements. Instead the scoring system has used the availability of protected and identified employment sites within settlements, as well as known sources of employment for the smaller settlements. In addition the proximity to such employment opportunities has been taken into account when scoring a settlement.
- 5.11 The settlements that score well against this principle, Abergavenny, Caldicot, Chepstow, Magor Undy, Monmouth and Usk, all provide a range of employment opportunities, which is evidenced by their higher levels of self-containment, as shown in figure 2. The level of self-containment is a useful indicator of the number of people who live and work within the same settlement; this provides significant potential for minimising the need to travel and for sustainable travel. Opportunities to maximise the employment self-containment of these settlements could be harnessed by focussing housing and employment growth towards these settlements.
- 5.12 There is a secondary cluster of settlements who score between 10% and 15% against this principle, among these are Llanfoist, Caerwent, Crick, Penperlleni, Raglan and Rogiet. The remainder have limited local employment opportunities but have access to employment opportunities in the larger settlements within the County as well as neighbouring Local Authority areas via their proximity to the public transport network and road infrastructure.

Table 9: Principle 3 - Employment Opportunities

Settlement	Protected Employment Site within settlement	Score	Identified Business/Industrial Site or Mixed-Use site within settlement	Score	Other Employment Opportunity (B1/B2 use) within settlement	Score	Proximity to Protected/Identified Employment Site if not within settlement	Score	Weighted Score % (Maximum achievable 30%)
Abergavenny	Yes	20	Yes	20	Yes	10	-	0	25%
Caldicot	Yes	20	Yes	20	Yes	10	-	0	25%
Chepstow	Yes	20	Yes	20	Yes	10	-	0	25%
Magor Undy	Yes	20	Yes	20	Yes	10	-	0	25%
Monmouth	Yes	20	Yes	20	Yes	10	-	0	25%
Usk	Yes	20	Yes	20	Yes	10	-	0	25%
Llanfoist	No	0	Yes	20	No	0	Less than 5 miles	10	15%
Caerwent	No	0	No	0	Yes	10	Less than 5 miles	10	10%
Crick	No	0	No	0	Yes	10	Less than 5 miles	10	10%
Cuckoo's Row	Yes	20	No	0	No	0	-	0	10%
Penpergwm	No	0	No	0	Yes	10	Less than 5 miles	10	10%
Penperlleni	No	0	No	0	Yes	10	Less than 5 miles	10	10%
Raglan	Yes	20	No	0	No	0	-	0	10%
Rogiet	Yes	20	No	0	No	0	-	0	10%
The Bryn	No	0	No	0	Yes	10	Less than 5 miles	10	10%
Devauden	No	0	No	0	Yes	10	5 – 10 miles	5	7.5%
Llanishen	No	0	No	0	Yes	10	5 – 10 miles	5	7.5%
Tintern	No	0	No	0	Yes	10	5 – 10 miles	5	7.5%
Brynygwenin	No	0	No	0	No	0	Less than 5 miles	10	5%
Coed-y-Paen	No	0	No	0	No	0	Less than 5 miles	10	5%
Dingestow	No	0	No	0	No	0	Less than 5 miles	10	5%
Great Oak	No	0	No	0	No	0	Less than 5 miles	10	5%
Gwehelog	No	0	No	0	No	0	Less than 5 miles	10	5%
Little Mill	No	0	No	0	No	0	Less than 5 miles	10	5%
Llanddewi Rhydderch	No	0	No	0	No	0	Less than 5 miles	10	5%
Llandenny	No	0	No	0	No	0	Less than 5 miles	10	5%
Portskewett	No	0	No	0	No	0	Less than 5 miles	10	5%
St Arvans	No	0	No	0	No	0	Less than 5 miles	10	5%
Llanellen	No	0	No	0	No	0	Less than 5 miles	10	5%
Llangwm	No	0	No	0	No	0	Less than 5 miles	10	5%
Llangybi	No	0	No	0	No	0	Less than 5 miles	10	5%
Llanover	No	0	No	0	No	0	Less than 5 miles	10	5%
Llantrisant	No	0	No	0	No	0	Less than 5 miles	10	5%
Llanvair Discoed	No	0	No	0	No	0	Less than 5 miles	10	5%
Llanvapley	No	0	No	0	No	0	Less than 5 miles	10	5%
Mathern	No	0	No	0	No	0	Less than 5 miles	10	5%
Mitchel Troy	No	0	No	0	No	0	Less than 5 miles	10	5%
Penallt	No	0	No	0	No	0	Less than 5 miles	10	5%

Settlement	Protected Employment Site within settlement	Score	Identified Business/Industrial Site or Mixed-Use site within settlement	Score	Other Employment Opportunity (B1/B2 use) within settlement	Score	Proximity to Protected/Identified Employment Site if not within settlement	Score	Weighted Score % (Maximum achievable 30%)
Pwllmeyric	No	0	No	0	No	0	Less than 5 miles	10	5%
Sudbrook	No	0	No	0	No	0	Less than 5 miles	10	5%
Bettws Newydd	No	0	No	0	No	0	5 – 10 miles	5	2.5%
Broadstone/Catbrook	No	0	No	0	No	0	5 – 10 miles	5	2.5%
Cross Ash	No	0	No	0	No	0	5 – 10 miles	5	2.5%
Llanarth	No	0	No	0	No	0	5 – 10 miles	5	2.5%
Llandegveth	No	0	No	0	No	0	5 – 10 miles	5	2.5%
Llandogo	No	0	No	0	No	0	5 – 10 miles	5	2.5%
Llansoy	No	0	No	0	No	0	5 – 10 miles	5	2.5%
Llantilio Crossenny	No	0	No	0	No	0	5 – 10 miles	5	2.5%
Llanvair Kilgeddin	No	0	No	0	No	0	5 – 10 miles	5	2.5%
Shirenewton/Mynyddbach	No	0	No	0	No	0	5 – 10 miles	5	2.5%
The Narth	No	0	No	0	No	0	5 – 10 miles	5	2.5%
Tredunnoch	No	0	No	0	No	0	5 – 10 miles	5	2.5%
Trellech	No	0	No	0	No	0	5 – 10 miles	5	2.5%
Werngifford/Pandy	No	0	No	0	No	0	5 – 10 miles	5	2.5%
Grosmont	No	0	No	0	No	0	Greater than 10 miles	0	0%

- 5.13 The BRES data is an employer survey of the number of jobs held by employees broken down by full/part-time and detailed industry (5 digit SIC2007)²³. The survey records a job at the location of an employee’s workplace and therefore does not reflect where a person lives. However, this data is useful in that it provides an estimate of the number of jobs that are available in our settlements and the industry in which that job can be found. For the purposes of this appraisal figures are included at tables 10 and 11 below for broad industrial groups.
- 5.14 The survey found that in 2017 there were nearly 35,300 jobs in Monmouthshire, excluding that part within the Brecon Beacons National Park. Of these the largest number of jobs are found in the professional and service sectors, which account for over a quarter of all jobs. Table 10 below shows the percentage breakdown of jobs within the County by broad industrial sector at the time of the survey.

Table 10: Percentage breakdown of jobs by broad industrial sector

Broad Industrial Sector	%
Professional & Service employees ²⁴	25.3
Wholesale, retail, motor trades, transport & storage employees	19.9
Health employees	16.6
Manufacturing, construction employees	15.2
Accommodation & Food Services employees	8.3
Education employees	6.9
Leisure Employees ²⁵	4.8
Agriculture, forestry, mining, quarrying employees	2.9

Source: Business Register and Employment Survey 2017

²³ The Standard Industrial Classification (SIC) is a system for classifying industries by a five-digit code

²⁴ This includes those employed in information & communication, finance, insurance & property, professional, scientific & technical, business administration & support services, and public administration & defence.

²⁵ This includes those employed in arts, entertainment, recreation & other services.

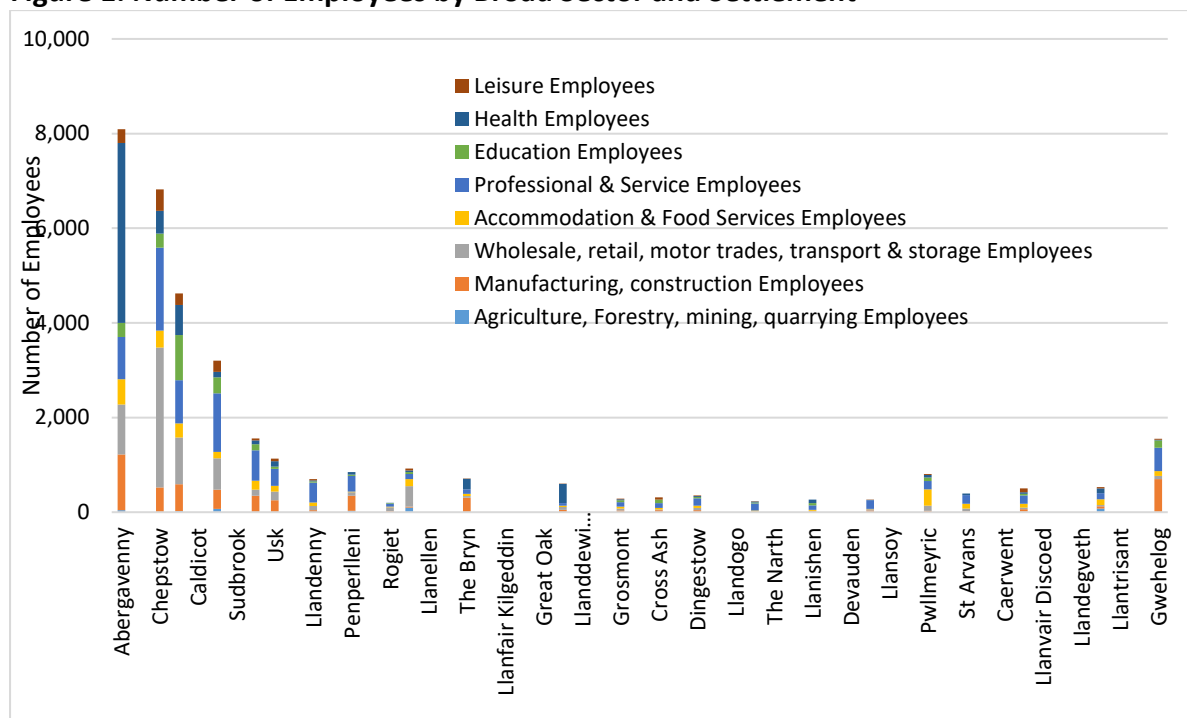
Table 11: Number of Employees by Broad Industry

Settlements	Agriculture, forestry, mining, quarrying Employees	Manufacturing, construction Employees	Wholesale, retail, motor trades, transport & storage Employees	Accommodation & Food Services Employees	Professional & Service Employees	Education Employees	Health Employees	Leisure Employees	Total
Abergavenny Brynygwenin	40	1,180	1,055	535	890	300	3,800	295	8,095
Chepstow	0	525	2,955	355	1,755	300	475	455	6,820
Monmouth	20	570	990	295	915	950	640	240	4,620
Caldicot Portskewett Sudbrook	70	405	665	135	1,235	340	115	240	3,205
Magor Undy	0	345	130	190	645	125	85	35	1,555
Usk	0	255	180	120	360	50	110	55	1,130
Raglan Llandenny Cuckoos Row	0	45	85	75	420	30	20	25	700
Penperlleni Little Mill	30	320	70	15	330	30	50	0	845
Rogiet	0	25	80	10	65	10	10	0	200
Llanfoist Llanellen	100	15	435	150	105	40	40	40	925
Llanover The Bryn Penpergwm Llanfair Kilgeddin	0	310	30	50	90	0	225	10	715
Bettws Newydd Great Oak Llanarth Llanddewi Rhydderch Llanvapley	0	50	60	30	55	0	400	10	605
Grosmont Werngifford Pandy	0	35	45	35	95	40	20	15	290
Cross Ash Llantilio Crossenny	0	45	10	35	100	75	0	50	325
Dingestow Mitchel Troy	0	45	45	50	150	30	20	15	355
Llandogo Penallt The Narth	0	15	0	20	150	20	20	10	235
Broadstone/Catbrook Llanishen Trelleck	0	20	10	20	95	45	75	0	265
Devauden Llangwm Llansoy	0	35	25	10	185	0	5	5	265

Settlements	Agriculture, forestry, mining, quarrying Employees	Manufacturing, construction Employees	Wholesale, retail, motor trades, transport & storage Employees	Accommodation & Food Services Employees	Professional & Service Employees	Education Employees	Health Employees	Leisure Employees	Total
Mathern Pwllmeyric Shirenewton/ Mynydd bach	0	30	105	350	175	75	50	20	805
St Arvans Tintern	0	15	65	100	180	0	35	0	395
Caerwent Crick Llanvair Discoed	10	50	40	75	180	30	40	75	500
Coed y Paen Llandegveth Llangybi Llantrisant Treddunock	75	50	25	125	125	0	100	30	530
Gwehelog	0	700	65	100	500	150	15	20	1,550
Total	360	5,085	7,170	2,880	8,800	2,640	6,350	1,645	34,930

Source: Business Register and Employment Survey 2017

Figure 1: Number of Employees by Broad Sector and Settlement



Source: Business Register and Employment Survey 2017

5.15 Both Table 11 and Figure 1 show that there were nearly 35,000 employees in 2017 within those settlements included within this appraisal. The main concentrations of employment are in the three county towns and the Severnside area, who between them account for nearly 72% of all employment. Analysis of the data shows that there is a secondary group of settlements around which employment is concentrated, Llanfoist, Penperlleni, Raglan and Usk. In total 82% of all employees have jobs in the following settlements:

- Abergavenny
- Portskewett
- Penperlleni²⁶
- Chepstow
- Sudbrook
- Raglan²⁷
- Monmouth
- Rogiet
- Usk
- Caldicot
- Caerwent²⁸
- Magor Undy
- Llanfoist

5.16 Whilst the professional and service sector accounts for most employees in the County this is not the case for all settlements. Table 12 shows the percentage breakdown of employment by the broad industrial sectors for each of the settlements listed above. The largest employment sectors are highlighted in green.

²⁶ Includes Little Mill

²⁷ Includes Llandenny & Cuckoos Row

²⁸ Includes Crick & Llanvair Discoed

Table 12: Percentage breakdown of jobs by broad industrial sector for Specific Settlements

Settlements	Agriculture, forestry, mining, quarrying Employees	Manufacturing, construction Employees	Wholesale, retail, motor trades, transport & storage Employees	Accommodation & Food Services Employees	Professional & Service Employees	Education Employees	Health Employees	Leisure Employees
Abergavenny Brynygwenin	0.5	14.6	13.0	6.6	11.0	3.7	46.9	3.6
Chepstow	-	7.7	43.3	5.2	25.7	4.4	7.0	6.7
Monmouth	0.4	12.3	21.4	6.4	19.8	20.6	13.8	5.2
Caldicot Portskewett Sudbrook	2.2	12.6	20.7	4.2	38.5	10.6	3.6	7.5
Magor Undy	-	22.2	8.4	12.2	41.5	8.0	5.5	2.3
Usk	-	22.6	15.9	10.6	31.9	4.4	9.7	4.9
Raglan Llandenny Cuckoos Row	-	6.4	12.1	10.7	60.0	4.3	2.9	3.6
Penperlleni Little Mill	3.6	37.9	8.3	1.8	39.1	3.6	5.9	-
Rogiet	-	12.5	40.0	5.0	32.5	5.0	5.0	-
Llanfoist Llanellen	10.8	1.6	47.0	16.2	11.4	4.3	4.3	4.3
Caerwent Crick Llanvair Discoed	2.0	10.0	8.0	15.0	36.0	6.0	8.0	15.0

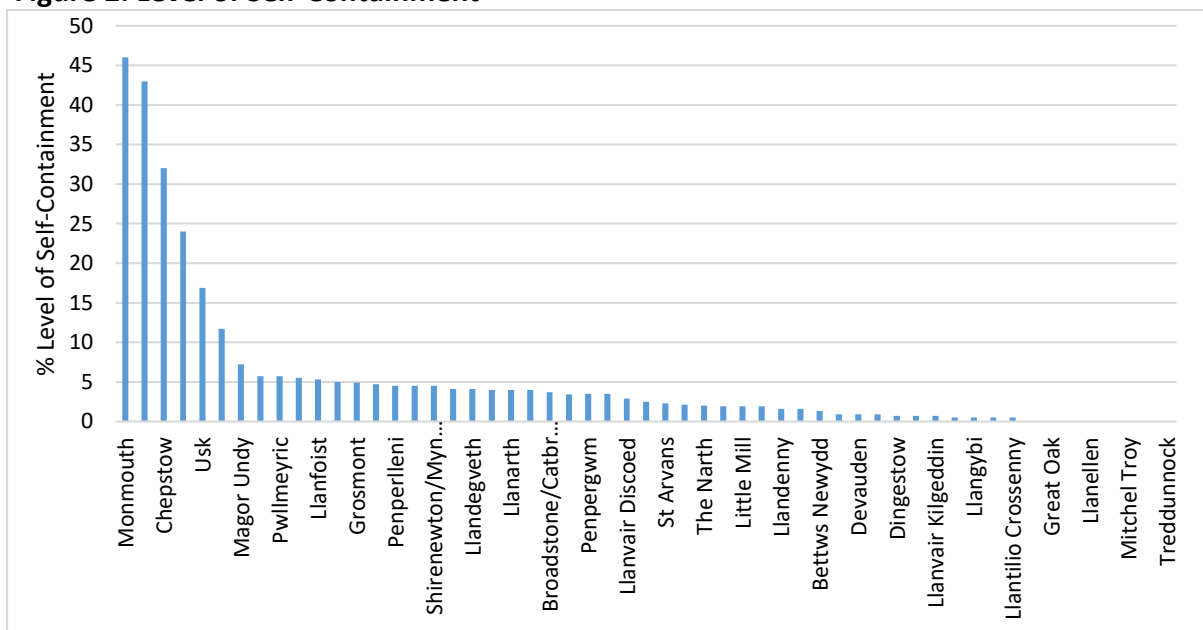
Source: Business Register and Employment Survey 2017

5.17 As discussed above self-containment is a useful indicator of the number of people who live and work within the same settlement. Figure 2 indicates the percentage of residents (aged 16+) in employment within the settlement they resided in the week before the 2011 Census.

5.18 The median level of self-containment across all settlements in Monmouthshire is very low, 2.3%, which is not unexpected in a rural authority, although this varies considerably across the County. It is not surprising that settlements with a relatively high level of self-containment are those with a stronger employment role as identified in the assessment under principle 3 and the information with regard to the number of employees within each settlement. These settlements undoubtedly provide more opportunities for people to live and work in close proximity which is important in terms of reducing levels of out-commuting. The settlements with the highest levels of self-containment are:

- Monmouth - 46%
- Abergavenny - 43%
- Chepstow – 32%
- Caldicot – 24%
- Usk – 17%
- Raglan – 12%

Figure 2: Level of Self-Containment

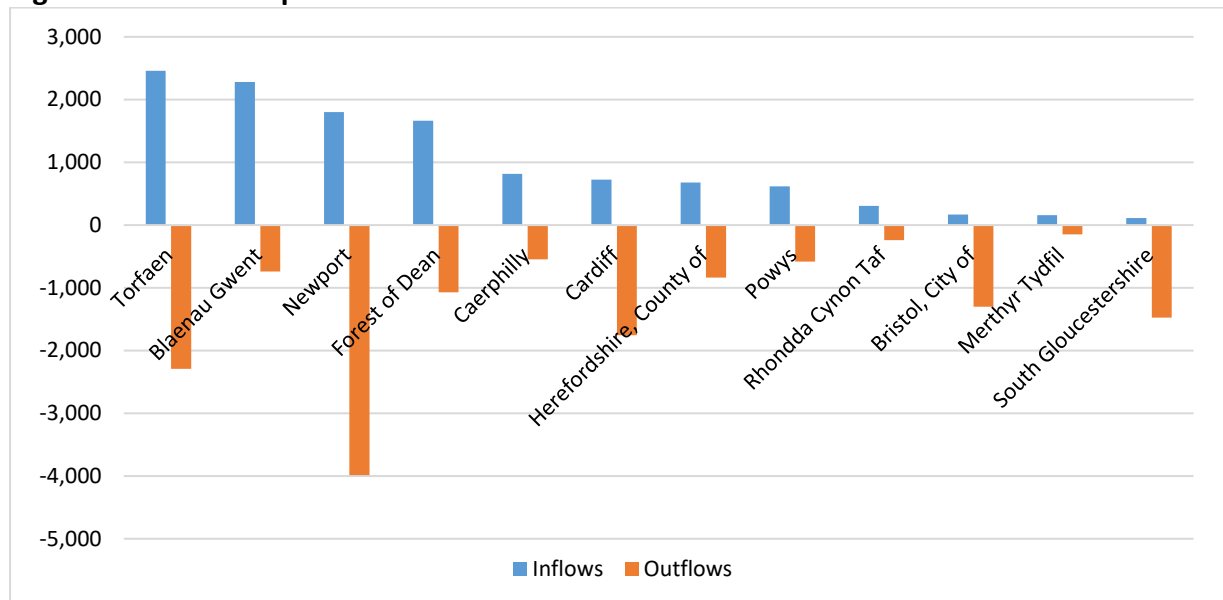


Source: 2011 Census

5.19 Travel to work patterns can further show the relationship between places in terms of employment. At the County level Figure 3 shows the main travel to work flows between Monmouthshire and other local authority areas. The main inflows to the County are from Torfaen, Blaenau Gwent, Newport and the Forest of Dean. Whilst the main outflows from the County are to Newport, Torfaen, Cardiff, South Gloucestershire and Bristol. At the time of the 2011 Census there were 12,988 people

commuting into the County for employment and 17,450 commuting out, thus there was a net out commute of 4,552 people. This level of out-commuting means that 42% of residents who were in employment at the time of the Census were commuting out of the County for work.

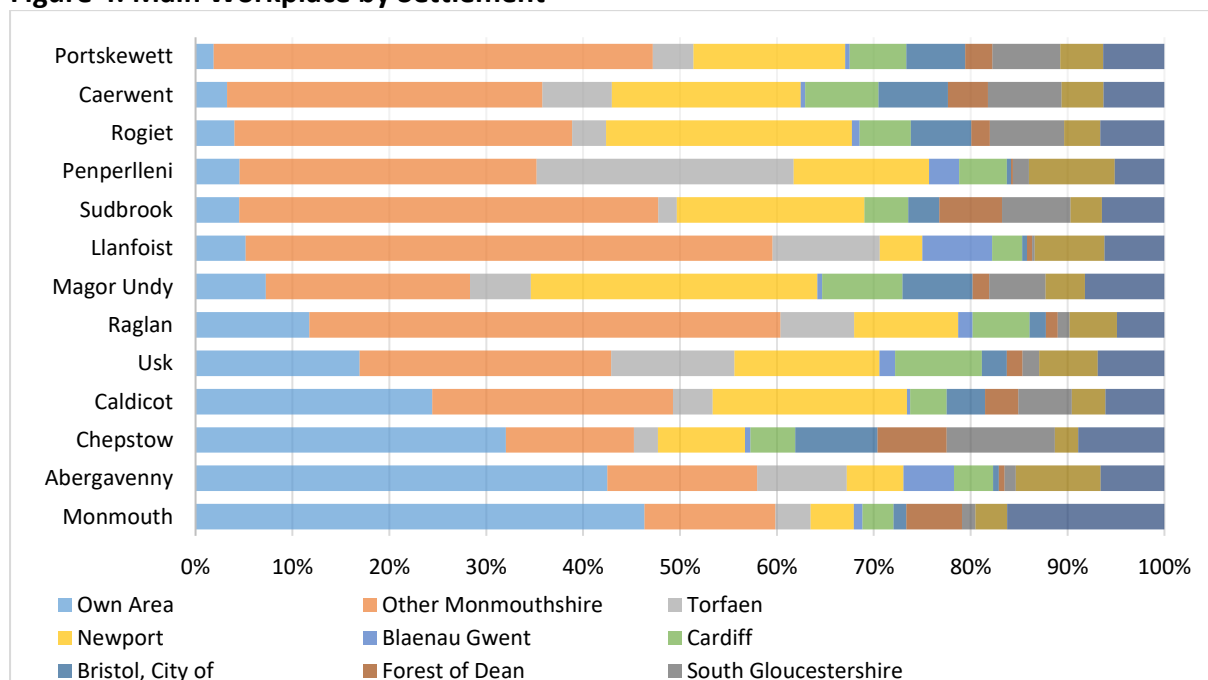
Figure 3: Main Workplace Inflows and Outflows to Monmouthshire



Source: 2011 Census

5.20 In addition to the County level it is also important to understand how these trends vary at sub local authority level. Travel to work analysis has therefore been undertaken for those 13 settlements listed above around which the majority of employment within the County is concentrated.

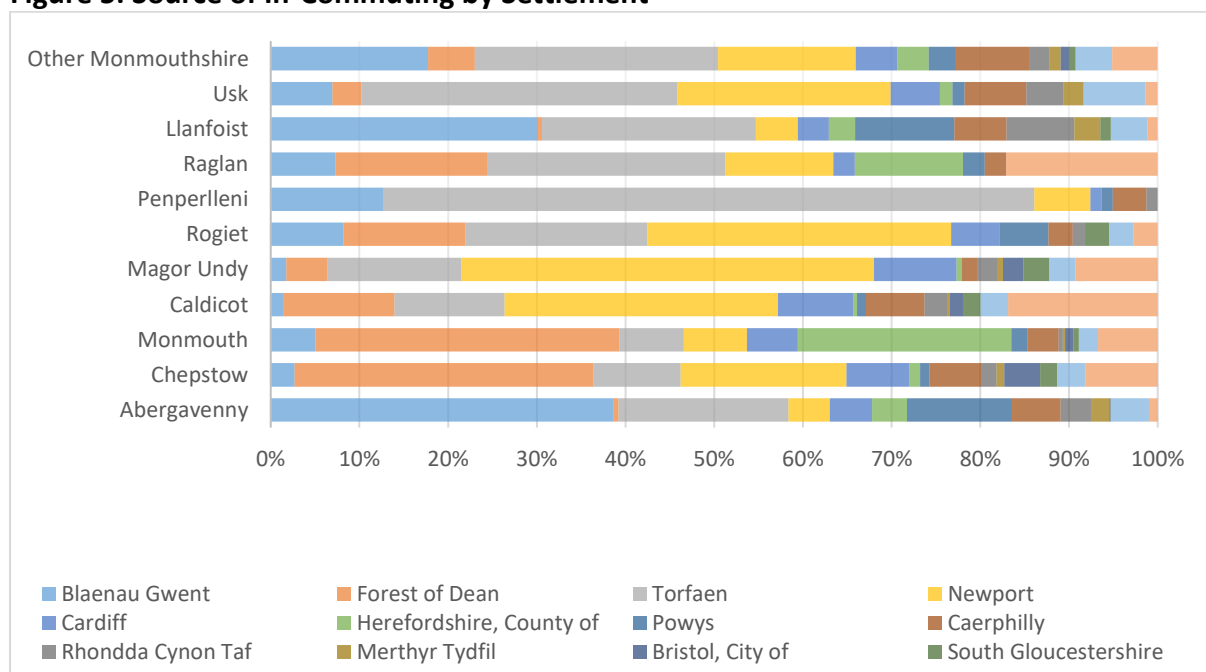
Figure 4: Main Workplace by Settlement



Source: 2011 Census

- 5.21 Analysis of Figure 4 shows that Monmouthshire is the main workplace destination for many residents, most particularly in Abergavenny, Monmouth, Llanfoist and Raglan where more than half of residents work within the County. The neighbouring counties of Newport and Torfaen are also significant workplace destinations for residents. For those settlements in the south of the County Bristol, the Forest of Dean and South Gloucestershire are also significant employment destinations. Of those residents working in the County, the main focus for employment are the towns of Abergavenny, Caldicot, Chepstow and Monmouth, who between them account for 71% of employment destinations for residents.
- 5.22 Figures 5 and 6 show how different settlements within the County attract workers from outside of Monmouthshire. The towns of Abergavenny, Caldicot, Chepstow and Monmouth attract the most in-commuting from outside of the County, which is not surprising given the greater number of employment opportunities in these settlements. Between them they account for 63% of all of the workers commuting in from the surrounding authorities. For Abergavenny the main source of in-commuting is from Blaenau Gwent and Torfaen, for Chepstow it is the Forest of Dean and Newport and for Monmouth it is the Forest of Dean and Herefordshire.

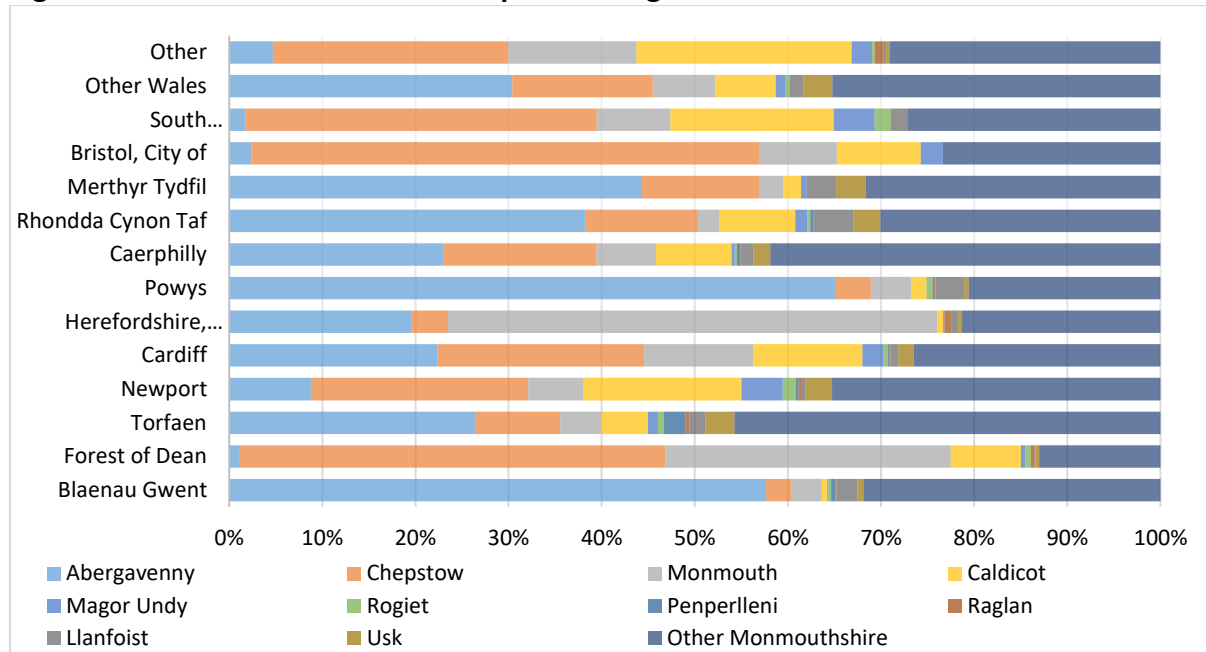
Figure 5: Source of In-Commuting by Settlement



Source: 2011 Census

- 5.23 Those commuting in to the County to work are undoubtedly travelling to those settlements which are the closest geographically to them. Figure 6 shows that the majority of in-commuters from Blaenau Gwent and Powys are travelling to Abergavenny, the majority of in-commuters from Bristol and the Forest of Dean are travelling to Chepstow and the majority of in-commuters from Herefordshire are travelling to Monmouth.

Figure 6: Main Home Location of People Working in Monmouthshire



Source: 2011 Census

5.24 The combination of data sources provides a good indication of the balance of sustainable employment opportunities in Monmouthshire. Notwithstanding the importance and value of settlements with smaller, local employment bases, a number of settlements with a strong employment function can be identified:

- Abergavenny
- Caldicot
- Chepstow
- Monmouth

5.25 Outside of these core settlements, there are a number of other settlements which are also providing an employment role, these are Usk, Magor Undy, Llanfoist, Raglan and to a lesser extent Penperlleni.

6. Initial Ranking of Settlements based on their Weighted Scores against the 3 Principles

6.1 The settlements have been divided into 6 tiers depending on their weighted score against each of the 3 principles. The tiers have been colour coded, with tiers 1 and 2 green as they achieve the highest scores and are thus the most sustainable in terms of the quantitative appraisal, tiers 3 and 4 amber as they have a lower level of sustainability and tiers 5 and 6 with the lowest scores and thus the least sustainable, red. The tiers have been arrived at by plotting the individual scores on a graph and then identifying the natural breaks in the data. This way of classifying the data allows for an 'optimal' classification system that identifies data breaks, for a given number of classes, which will minimise within-class variance and maximise between-class differences.

6.2 Using this combination of scoring and colour coding the table below provides an initial hierarchy of the settlements included in this assessment. Maps showing the spatial distribution of the settlements according to which tier they are in for each of the individual principles are set out below.

Table 13: Initial Hierarchy of Settlements based on their weighted scores against the 3 Principles

Settlement	Principle 1: Transport Services & Accessibility		Principle 2: Community services & facilities		Principle 3: Employment Opportunity		Total	
	Score %	Tier	Score %	Tier	Score %	Tier	Score %	Tier

Tier 1

Chepstow	32.2	Tier 1	22.7	Tier 1	25.0	Tier 1	79.9	Tier 1
Caldicot	32.2	Tier 1	21.8	Tier 1	25.0	Tier 1	79.0	Tier 1
Abergavenny	32.2	Tier 1	21.5	Tier 1	25.0	Tier 1	78.7	Tier 1
Monmouth	20.0	Tier 2	20.8	Tier 1	25.0	Tier 1	65.8	Tier 1
Magor Undy	26.7	Tier 2	13.3	Tier 2	25.0	Tier 1	65.0	Tier 1

Tier 2

Usk	21.1	Tier 2	13.6	Tier 2	25.0	Tier 1	59.7	Tier 2
Llanfoist	27.8	Tier 2	7.6	Tier 3	15.0	Tier 2	50.4	Tier 2
Rogiet	32.2	Tier 1	7.6	Tier 3	10.0	Tier 2	49.8	Tier 2
Caerwent	27.8	Tier 2	7.9	Tier 3	10.0	Tier 2	45.7	Tier 2
Raglan	21.1	Tier 2	11.0	Tier 2	10.0	Tier 2	42.1	Tier 2
Penperlleni	21.1	Tier 2	8.2	Tier 3	10.0	Tier 2	39.3	Tier 2

Tier 3

Crick	17.8	Tier 3	2.2	Tier 6	10.0	Tier 2	30.0	Tier 3
Portskewett	16.7	Tier 3	8.2	Tier 3	5.0	Tier 4	29.9	Tier 3
The Bryn	14.4	Tier 4	4.1	Tier 4	10.0	Tier 2	28.5	Tier 3
St Arvans	16.7	Tier 3	6.6	Tier 4	5.0	Tier 4	28.3	Tier 3
Tintern	11.1	Tier 4	8.2	Tier 3	7.5	Tier 3	26.8	Tier 3
Penpergwm	14.4	Tier 4	2.2	Tier 6	10.0	Tier 2	26.6	Tier 3
Little Mill	16.7	Tier 3	4.7	Tier 4	5.0	Tier 4	26.4	Tier 3
Llanellen	16.7	Tier 3	4.1	Tier 4	5.0	Tier 4	25.8	Tier 3
Pwllmeyric	17.8	Tier 3	2.2	Tier 6	5.0	Tier 4	25.0	Tier 3
Llanover	15.6	Tier 3	4.1	Tier 5	5.0	Tier 4	24.7	Tier 3
Cuckoo's Row	12.2	Tier 4	2.2	Tier 6	10.0	Tier 2	24.4	Tier 3
Mathern	13.3	Tier 4	6.0	Tier 4	5.0	Tier 4	24.3	Tier 3
Devauden	10.0	Tier 5	5.7	Tier 4	7.5	Tier 3	23.2	Tier 3
Sudbrook	12.2	Tier 4	4.4	Tier 4	5.0	Tier 4	21.6	Tier 3
Llanvair Discoed	12.2	Tier 4	3.8	Tier 5	5.0	Tier 4	21.0	Tier 3
Shirenewton/Mynyddbach	11.1	Tier 4	7.6	Tier 3	2.5	Tier 5	21.2	Tier 3
Llanvapley	12.2	Tier 4	3.5	Tier 5	5.0	Tier 4	20.7	Tier 3

Gwehelog	12.2	Tier 4	3.2	Tier 5	5.0	Tier 4	20.4	Tier 3
Coed-y-Paen	12.2	Tier 4	2.9	Tier 5	5.0	Tier 4	20.1	Tier 3

Tier 4

Brynygwenin	12.2	Tier 4	2.2	Tier 6	5.0	Tier 4	19.4	Tier 4
Llangybi	10.0	Tier 5	4.4	Tier 4	5.0	Tier 4	19.4	Tier 4
Dingestow	8.9	Tier 5	5.0	Tier 4	5.0	Tier 4	18.9	Tier 4
Penallt	8.9	Tier 5	4.4	Tier 4	5.0	Tier 4	18.3	Tier 4
Llandogo	10.0	Tier 5	5.4	Tier 4	2.5	Tier 5	17.9	Tier 4
Llandegveth	12.2	Tier 4	2.9	Tier 5	2.5	Tier 5	17.6	Tier 4
Werngifford/Pandy	10.0	Tier 5	5.0	Tier 4	2.5	Tier 5	17.5	Tier 4
Great Oak	10.0	Tier 5	2.2	Tier 6	5.0	Tier 4	17.2	Tier 4
Mitchel Troy	8.9	Tier 5	3.2	Tier 5	5.0	Tier 4	17.1	Tier 4
Llanishen	5.6	Tier 5	3.8	Tier 5	7.5	Tier 3	16.9	Tier 4
Llangwm	8.9	Tier 5	2.9	Tier 5	5.0	Tier 4	16.8	Tier 4
Llanddewi Rhydderch	7.8	Tier 5	3.8	Tier 5	5.0	Tier 4	16.6	Tier 4
Trellech	8.9	Tier 5	5.0	Tier 4	2.5	Tier 5	16.4	Tier 4
Llantrisant	7.8	Tier 5	2.9	Tier 5	5.0	Tier 4	15.7	Tier 4

Tier 5

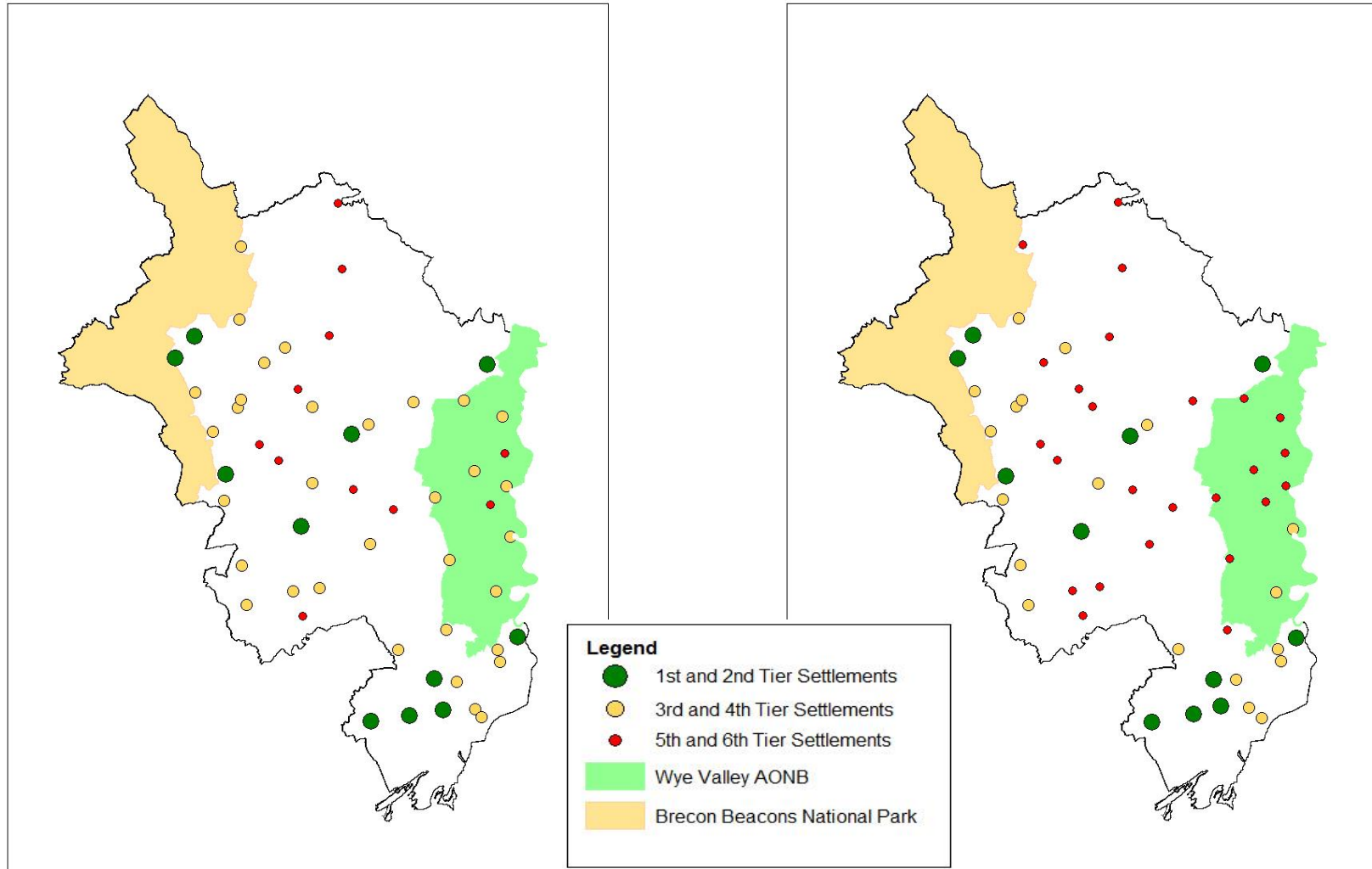
Llandenny	6.7	Tier 5	3.2	Tier 5	5.0	Tier 4	14.9	Tier 5
The Narth	8.9	Tier 5	3.5	Tier 5	2.5	Tier 5	14.9	Tier 5
Llansoy	7.8	Tier 5	2.5	Tier 6	2.5	Tier 5	12.8	Tier 5
Llanvair Kilgeddin	7.8	Tier 5	2.2	Tier 6	2.5	Tier 5	12.5	Tier 5
Llanarth	5.6	Tier 5	3.8	Tier 5	2.5	Tier 5	11.9	Tier 5
Grosmont	6.7	Tier 5	4.4	Tier 4	0	Tier 6	11.1	Tier 5

Tier 6

Broadstone/Catbrook	3.3	Tier 6	3.5	Tier 5	2.5	Tier 5	9.3	Tier 6
Bettws Newydd	3.3	Tier 6	2.9	Tier 5	2.5	Tier 5	8.7	Tier 6
Cross Ash	3.3	Tier 6	3.8	Tier 5	2.5	Tier 5	9.6	Tier 6
Llantilio Crossenny	3.3	Tier 6	2.2	Tier 6	2.5	Tier 5	8.0	Tier 6
Tredunnoch	3.3	Tier 6	2.2	Tier 6	2.5	Tier 5	8.0	Tier 6

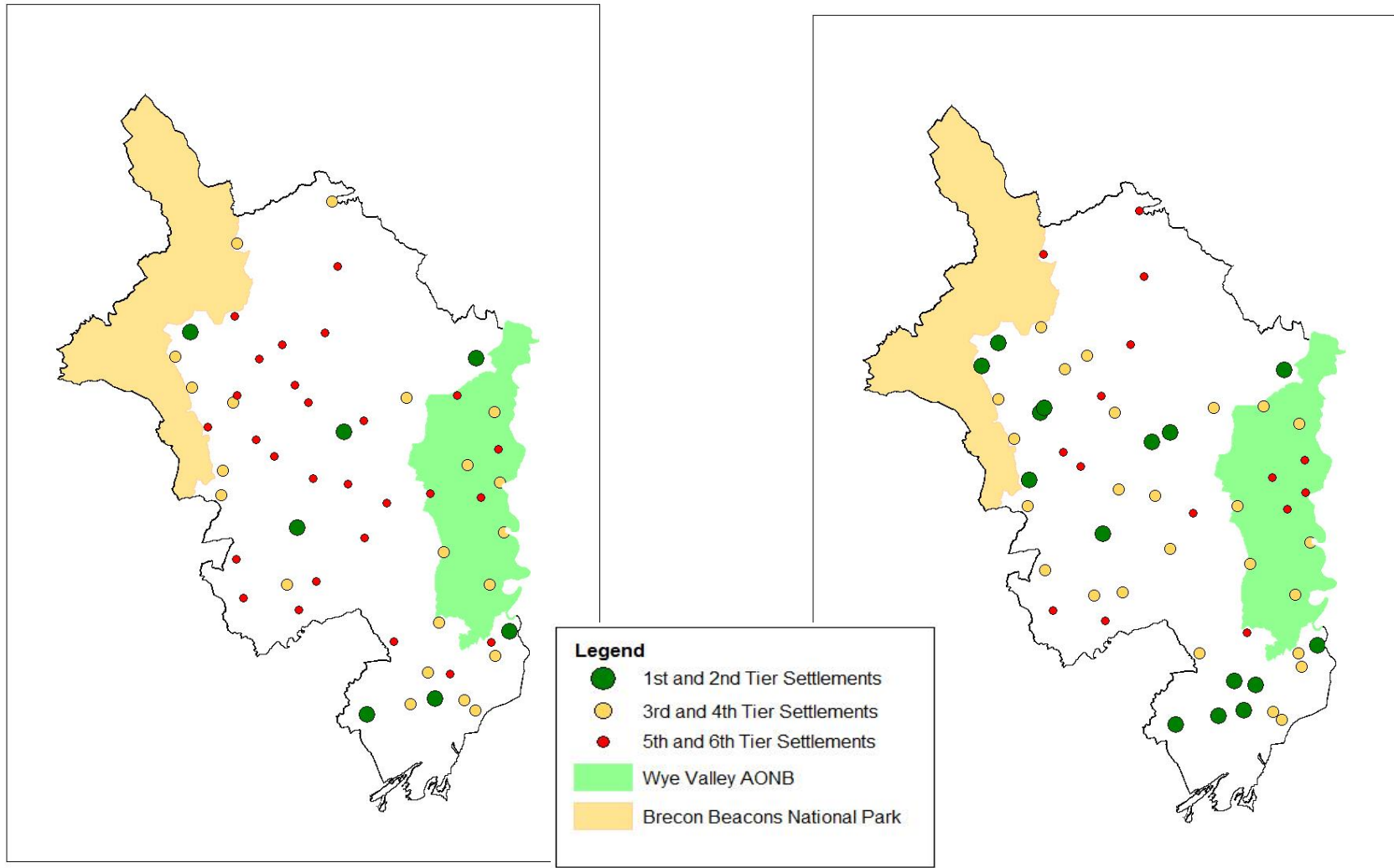
Map 1: Spatial Distribution of Settlements by all 3 Principles

Map 2: Spatial Distribution of Settlements by Principle 1 – Transport Services & Accessibility



**Map 3: Spatial Distribution of Settlements by Principle 2
Community Services & Facilities**

**Map 4: Spatial Distribution of Settlements by Principle 3 – Employment
Opportunity**



7. Initial Ranking of Settlements based on Population Size

7.1 The Consultation Draft Development Plan Manual (June 2019) recommends that the size of a settlement be taken into account in the settlement assessment in addition to the areas covered under the 3 principles. Table 14 below shows the scores given for population size in accordance with the methodology at Table 4. On the basis of their estimated population size the settlements included in this appraisal can be ordered as follows, a more detailed breakdown of the individual settlement populations can be found at Appendix 4.

Table 14: Population of Individual Settlements

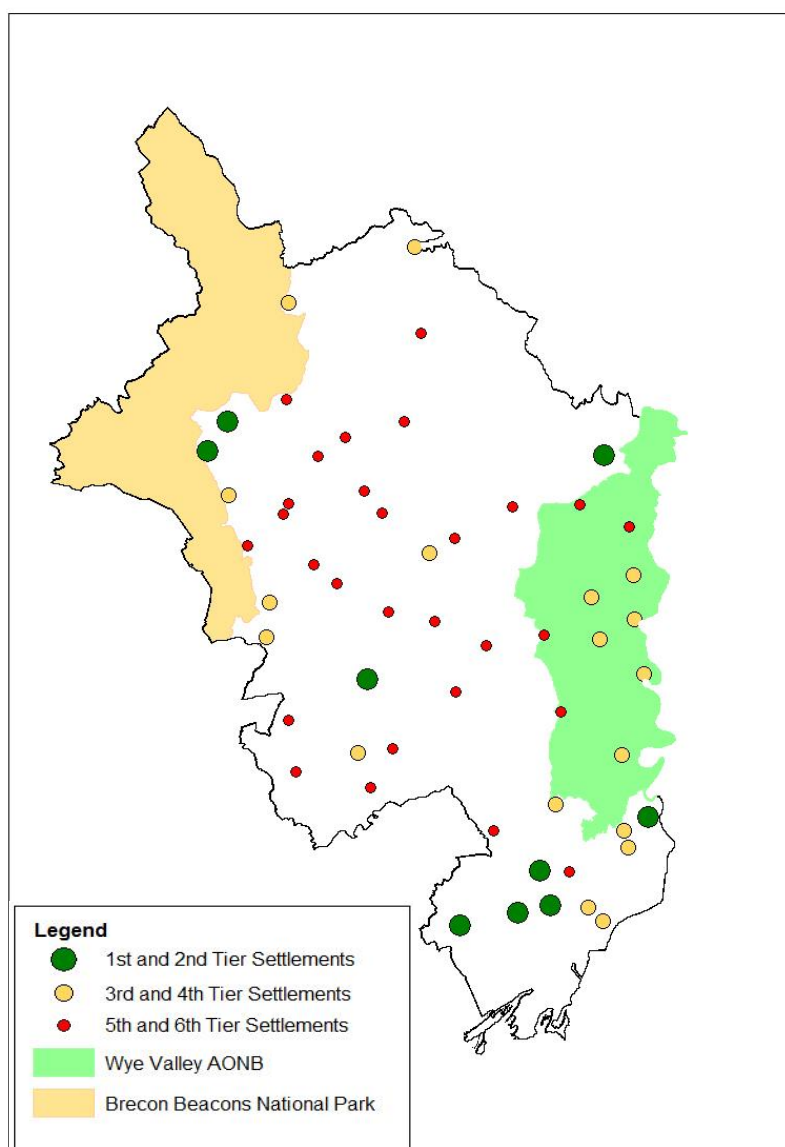
Population Size	Settlement	Score
First Tier >10000	Abergavenny	50
	Caldicot	50
	Chepstow	50
	Monmouth	50
Second Tier 1500 - 9999	Magor/Undy	30
	Caerwent	20
	Llanfoist	20
	Rogiet	20
	Usk	20
Third Tier 500 - 1499	Little Mill	10
	Penperlleni	10
	Portskewett	10
	Pwllmeyric	10
	Raglan	10
	Shirenewton/Mynydd Bach	10
	St Arvans	10
Fourth Tier 250 - 499	Broadstone/Catbrook	5
	Grosmont	5
	Llandogo	5
	Llanellen	5
	Llangybi	5
	Mathern	5
	Sudbrook	5
	The Narth	5
	Tintern	5
	Trellech	5
Werngifford/Pandy	5	
Fifth Tier 100 - 249	Bryngwenin	1

Population Size	Settlement	Score
	Crick	1
	Devauden	1
	Dingestow	1
	Great Oak	1
	Gwehelog	1
	Llanddewi Rhydderch	1
	Llanishen	1
	Llanover	1
	Llanvair Discoed	1
	Mitchel Troy	1
	Penallt	1
	The Bryn	1
Sixth Tier <100	Bettws Newydd	0
	Coed y Paen	0
	Cross Ash	0
	Cuckoos Row	0
	Llanarth	0
	Llandegveth	0
	Llandenny	0
	Llangwm	0
	Llansoy	0
	Llantilio Crossenny	0
	Llantrisant	0
	Llanvair Kilgeddin	0
	Llanvapley	0
	Penpergwm	0
	Tredunnock	0

Source: 2011 Census, JHLAs, Count of properties

7.2 From the table above it can be seen that only one settlement, Magor Undy, achieves a score of 30 for population size. As it would seem inappropriate for that settlement to sit in a tier on its own it has been grouped with the 2nd Tier settlements as whilst it is larger in population terms it has more in common with these settlements in terms of role and function than the larger Tier 1 settlements which are more akin to County towns than local centres. The map below shows the spatial distribution by population of the settlements included within this assessment.

Map 5: Spatial Distribution of Settlements by Population



8. Initial Ranking of Settlements based on Combined Population Size and Weighted Score against the 3 Principles

- 8.1 The distribution of population has a significant bearing on the function and roles of settlements, although population levels alone do not guarantee sustainability as a number of other spatial issues also come into effect, especially accessibility. However, to reflect the contribution of population size to the overall sustainability of settlements, each settlement has been given an additional score based on population size, as detailed in Table 4, in addition to its weighted score against the three principles. The resulting hierarchy from this is shown in Table 15 below.

Table 15: Initial Hierarchy of Settlements based on their weighted scores against the 3 Principles and their Population Size

Settlement	Total Score	Total Weighted Score %	Population
Tier 1 Settlements			
Chepstow	129.9	79.9	50
Caldicot	129	79	50
Abergavenny	128.7	78.7	50
Monmouth	115.8	65.8	50
Tier 2 Settlements			
Magor Undy	95	65	30
Usk	79.7	59.7	20
Llanfoist	70.4	50.4	20
Rogiet	69.8	49.8	20
Caerwent	65.7	45.7	20
Raglan	52.1	42.1	10
Penperlleni	49.3	39.3	10
Tier 3 Settlements			
Portskewett	39.9	29.9	10
St Arvans	38.3	28.3	10
Little Mill	36.4	26.4	10
Pwllmeyric	35	25	10
Tintern	31.8	26.8	5
Shirenewton/Mynyddbach	31.2	21.2	10
Crick	31	30	1
Llanellen	30.8	25.8	5
Tier 4 Settlements			
The Bryn	29.5	28.5	1
Mathern	29.3	24.3	5
Penpergwm	26.6	26.6	0
Sudbrook	26.6	21.6	5
Llanover	25.7	24.7	1
Cuckoo's Row	24.4	24.4	0
Llangybi	24.4	19.4	5
Devauden	24.2	23.2	1
Llandogo	22.9	17.9	5
Werngifford/Pandy	22.5	17.5	5
Llanvair Discoed	22	21	1
Gwehelog	21.4	20.4	1
Trellech	21.4	16.4	5
Llanvapley	20.7	20.7	0
Brynygwenin	20.4	19.4	1
Coed-y-Paen	20.1	20.1	0
Tier 5 Settlements			
Dingestow	19.9	18.9	1

Settlement	Total Score	Total Weighted Score %	Population
The Narth	19.9	14.9	5
Penallt	19.3	18.3	1
Great Oak	18.2	17.2	1
Mitchel Troy	18.1	17.1	1
Llanishen	17.9	16.9	1
Llanddewi Rhydderch	17.6	16.6	1
Llandegveth	17.6	17.6	0
Llangwm	16.8	16.8	0
Grosmont	16.1	11.1	5
Llantrisant	15.7	15.7	0
Llandenny	14.9	14.9	0
Broadstone/Catbrook	14.3	9.3	5
Llansoy	12.8	12.8	0
Llanvair Kilgeddin	12.5	12.5	0
Llanarth	11.9	11.9	0
Tier 6 Settlements			
Cross Ash	9.6	9.6	0
Bettws Newydd	8.7	8.7	0
Llantilio Crossenny	8	8	0
Tredunnoch	8	8	0

- 8.2 In order to add further context to the analysis it is also useful to look at the age profile for each settlement. Mid-Year Population Estimates are available at OA level, although at this low level geography the data needs to be treated with some caution. As OA's cover a minimum of 50 households for some of the smaller settlements this will mean that the surrounding area is also included within the estimate and for the very smallest settlements more than one settlement will fall within the OA. However, they do give an indication of the demography of the individual settlements.
- 8.3 The total 2017 based population estimate for the County is 93,590, with the four main towns accounting for over 50% of the population between them. Outside of these towns there are a further 8 settlements with a population exceeding 1,000. These twelve settlements combined account for 68% of the County's population.
- 8.4 Table 16 shows how the age structure varies between settlements. For the County as a whole nearly 25% of the population is estimated to be over 65, with 16% under 16 and 59% in the working aged population groups. However, specific settlements across the County differ from this average. An ageing demographic is one of the issues that Monmouthshire faces. Table 16 shows those settlements that have a higher than average proportion of their population in the over 65 age groups (these are shown in pink) and those settlements that have a higher than average proportion of their population in the working aged and younger age groups (these are shown in green).

8.5 The lower percentage of working age groups in some of the larger settlements, such as Abergavenny, Caldicot, Monmouth, Usk and Raglan could have longer term implications for local employment if there are insufficient economically active residents to support local employers. It also has implications for the level of commuting particularly as these settlements are currently among the County's employment hubs, as shown at paragraph 5.15 above.

Table 16: Mid-Year Population Estimates by Settlement and Age Group

Settlement	All Ages	Aged 0 to 15	%	Aged 16 - 64	%	Aged 65+	%
Abergavenny	13,306	2,175	16.3	7,629	57.4	3,502	26.3
Chepstow	12,451	2,260	18.2	7,743	62.1	2,448	19.7
Monmouth	10,873	1,959	18.0	6,173	56.8	2,741	25.2
Caldicot	10,477	1,780	17.0	6,130	58.5	2,567	24.5
Magor Undy	5,930	1,014	17.1	3,816	64.4	1,100	18.5
Usk	2,336	328	14.0	1,284	55.0	724	31.0
Rogiet	1,795	370	20.6	1,163	64.8	262	14.6
Caerwent & Crick	1,527	306	20.0	920	60.3	301	19.7
Llanfoist	1,452	314	21.6	862	59.4	276	19.0
Penperlleni	1,190	154	12.9	735	61.8	301	25.3
Raglan	1,180	162	13.7	614	52.1	404	34.2
Portskewett	1,146	202	17.6	700	61.1	244	21.3
St Arvans	758	114	15.0	405	53.5	239	31.5
Shirenewton/Mynydd bach	690	97	14.1	405	58.7	188	27.2
Werngifford Pandy	661	98	14.8	402	60.8	161	24.4
Tintern	656	96	14.6	384	58.6	176	26.8
Devauden	629	99	15.7	377	60.0	153	24.3
Pwllmeyric	620	85	13.7	377	60.8	158	25.5
Gwehelog	553	108	19.5	307	55.5	138	25.0
Little Mill	539	94	17.4	333	61.8	112	20.8
Treddunnoch	508	77	15.2	315	62.0	116	22.8
Llandogo	475	71	14.9	259	54.6	145	30.5
Llanellen	475	51	10.7	261	55.0	163	34.3
Llantrisant	471	86	18.3	267	56.6	118	25.1
Coed y Paen & Llandegveth	459	59	12.9	292	63.6	108	23.5
Llangybi	457	70	15.3	235	51.4	152	33.3
Llangwm & Llansoy	440	79	18.0	230	52.2	131	29.8
Broadstone	420	72	17.1	233	55.5	115	27.4
Grosmont	414	55	13.3	279	67.4	80	19.3
Trellech	411	71	17.3	239	58.1	101	24.6
Mathern	400	33	8.2	225	56.3	142	35.5
Cross Ash	380	70	18.4	218	57.4	92	24.2
Cuckoos Row	380	60	15.8	222	58.4	98	25.8

Settlement	All Ages	Aged 0 to 15	%	Aged 16 - 64	%	Aged 65+	%
Llandenny	380	55	14.5	227	59.7	98	25.8
Llanddewi Rhydderch	378	44	11.6	226	59.8	108	28.6
Llanishen	373	67	18.0	230	61.6	76	20.4
The Narth	373	42	11.3	190	50.9	141	37.8
Penallt	371	57	15.4	223	60.1	91	24.5
Llanover	365	40	11.0	201	55.0	124	34.0
Mitchel Troy	347	59	17.0	189	54.5	99	28.5
Sudbrook	346	47	13.6	240	69.3	59	17.1
Penpergwm & The Bryn	339	44	13.0	196	57.8	99	29.2
Llanvair Kilgeddin	338	42	12.4	181	53.6	115	34.0
Llantilio Crossenny	335	60	17.9	184	54.9	91	27.2
Bettws Newydd	332	46	13.9	206	62.0	80	24.1
Llanvair Discoed	319	37	11.6	195	61.1	87	27.3
Great Oak & Llanvapley	280	44	15.7	156	55.7	80	28.6
Dingestow	274	63	23.0	137	50.0	74	27.0
Brynygwenin	269	48	17.8	160	59.5	61	22.7
Llanarth	254	37	14.6	164	64.5	53	20.9

Source Mid-Year Population Estimates (2017)

9. Defining Settlement Clusters

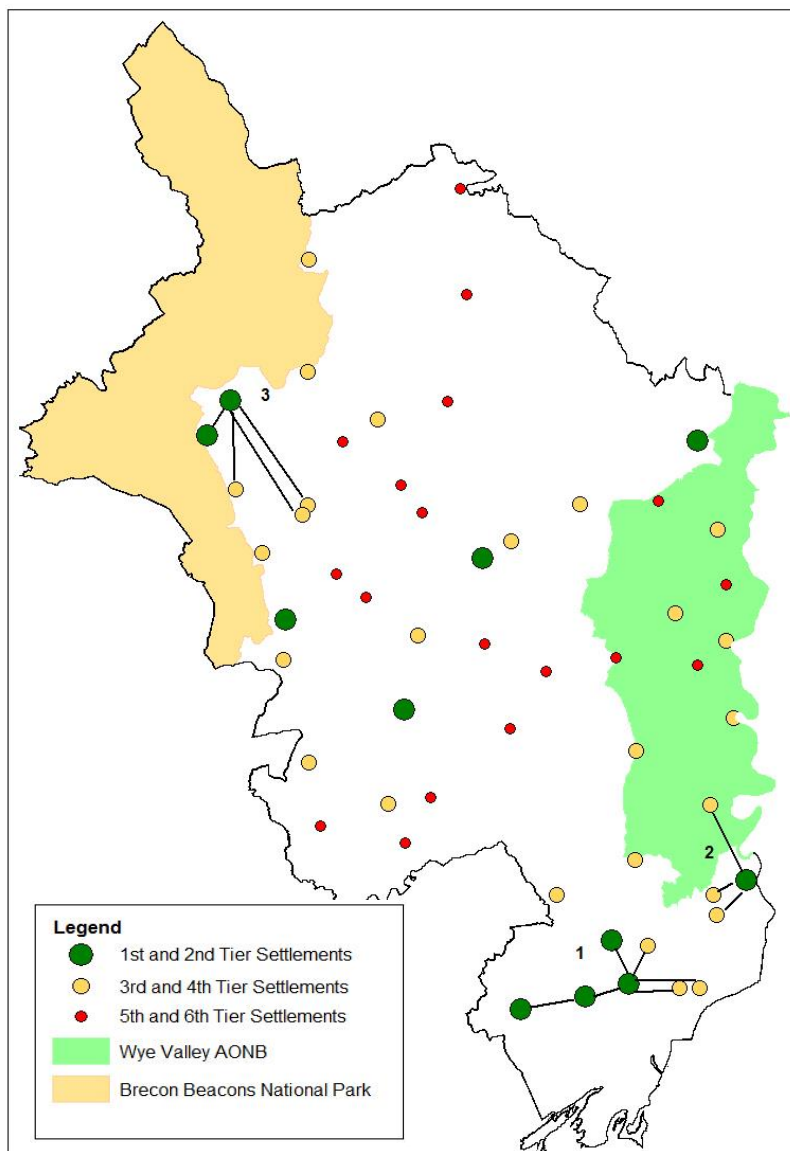
- 9.1 This section seeks to supplement the above analysis by identifying broad geographical clusters of settlements by applying the criteria as detailed in para 3.25 above. This recognises the role and function that smaller settlements play within the County.
- 9.2 By applying the criteria as detailed in para 3.25 above it is possible to define clusters of smaller settlements which have a geographical and functional link to a tier 1 settlement within that cluster. The results of the cluster analysis is set out at Appendix 5. The smaller settlements within the cluster whilst located within the rural hinterland of a tier 1 settlement and relying on that settlement for many of their day to day needs also contribute to that settlement's social, economic and environmental fabric and could be capable of accommodating some development despite their position within the settlement hierarchy due to their close links with the tier 1 settlement.
- 9.3 The cluster analysis identifies 3 groups of settlements within the county which meet the criteria and have the capacity to form a cluster, the spatial distribution of the clusters are shown in the map below.

Cluster 1: **Caldicot – Tier 1**
 Rogiet – Tier 2
 Magor Undy – Tier 2
 Caerwent – Tier 2
 Portskewett – Tier 3
 Crick – Tier 3
 Sudbrook – Tier 4

Cluster 2: **Chepstow – Tier 1**
 St Arvans – Tier 3
 Pwllmeyric – Tier 3
 Mathern – Tier 4

Cluster3: **Abergavenny – Tier 1**
 Llanfoist – Tier 2
 Llanellen – Tier 3
 The Bryn – Tier 4
 Penpergwm – Tier 4

Map 6: Spatial Distribution of the Clusters



- 9.4 Cluster 1, the Severnside area, centres on the Tier 1 settlement of Caldicot. Of the three identified clusters, cluster 1 is the strongest cluster with the tier 1 settlement of Caldicot and three tier 2 settlements located within it, Magor Undy, Rogiet and Caerwent. The settlements within this cluster have particularly strong geographic and transport links between them and clearly make up an identifiable group of settlements.
- 9.5 Cluster 2 centres on the Tier 1 settlement of Chepstow, with three smaller settlements having particularly strong geographical links to it. In contrast to cluster 1 the smaller settlements in Cluster 2 are all lower tier settlements. These settlements whilst undoubtedly having strong geographical links in terms of distance from the Tier 1 settlement of Chepstow do not have as strong transport links and so whilst as a group of settlements having the potential to support some additional future development this will be dependent upon any physical/environmental and infrastructure constraints of the individual settlements and their ability to accommodate additional development given the sensitivity of landscapes, the countryside character of rural settlements .
- 9.6 Cluster 3 centres on the Tier 1 settlement of Abergavenny. This cluster of settlements, whilst having Tier 1 to 4 settlements within the cluster do not, with the exception of Llanfoist, have strong functional and transport links between them. As with cluster 2 the smaller settlements in the cluster undoubtedly have strong geographical links with the Tier 1 settlement but do not have as strong transport links and so whilst as a group of settlements having the potential to support some additional future development this will again be dependent upon any physical/environmental and infrastructure constraints of individual settlements and their ability to accommodate additional development given the sensitivity of landscapes, the countryside character of rural settlements. Llanfoist is the exception within this cluster as it has very strong functional as well as geographic links to Abergavenny with a similar relationship to that settlement as Wyesham has to the settlement of Monmouth, it is therefore considered appropriate to cluster Llanfoist with Abergavenny.
- 9.7 Monmouth despite its position as a Tier 1 settlement does not have particularly strong transport links with any of the smaller settlements within the surrounding area, none of which achieve higher than Tier 4 and thus does not constitute a cluster, although it undoubtedly acts as a service centre for its rural hinterland.

10. Settlement Appraisal Conclusions

- 10.1 This appraisal has analysed a large amount of information to help determine the role and function of settlements within the County and builds on the work undertaken for the Function and Hierarchy of Settlements Study (October 2008) which informed the settlement hierarchy for the current adopted LDP. The work has been undertaken using a scoring system against three principles, based on the regional SEWSPG methodology, with some adjustments to ensure a locally relevant scoring system. The three primary principles used to analyse each settlement are sustainable

transport and accessibility, facilities and services and employment provision. Consideration of each of these principles together with a settlement's population size, has assisted the process of identifying a settlement hierarchy based on this quantitative assessment and can be used as part of the evidence base to inform decisions as to where development should be spatially located in relation to existing settlements to achieve a sustainable pattern of growth. It is, however, recognised that a settlement's ability to support further growth is dependent on a range of additional considerations, including physical/environmental constraints, infrastructure capacity and future role/function.

- 10.2 This appraisal confirms the dominant role of the County towns of Abergavenny, Chepstow, Caldicot and Monmouth. All four towns score highly against the three principles reinforcing their function as service centres for their rural hinterlands. Monmouth, due to its lack of a railway station within the town and the relative distance to access the nearest railway station achieves a lower score against principle 1 than the other towns. However, it achieves a comparably high score against the other two principles. Over half of the population of the County live within one of these settlements, benefiting from their accessibility and the range of services and facilities that they offer. The relative self-containment of these settlements compared to other settlements within the County justifies their classification as Primary Settlements which can be maintained and strengthened through future sustainable development.
- 10.3 In addition to the four Primary Settlements there are two other settlements, Magor Undy and Usk, which also perform well, justifying their position as Secondary Settlements. Whilst not having the full range of facilities offered by the Primary Settlements, they provide services which benefit both their residents and the surrounding rural hinterlands, with Magor Undy in particular benefiting from its location in the M4 corridor and its proximity to sustainable transport modes and to Newport.
- 10.4 Outside of these two settlements there is a distinct group of other Secondary Settlements. Of these Llanfoist and Rogiet are the higher scoring settlements, with Caerwent, Raglan and Penperlleni also performing well in terms of the appraisal. It is anticipated that whilst these Secondary Settlements do not offer the full range of services and facilities that can be found in the Primary Settlements they would be capable of supporting some additional sustainable growth. The scale of future planned development should reflect their individual role, function and size, acknowledging that these settlements currently provide local services/facilities to meet the needs of their immediate vicinities.
- 10.5 The cluster analysis recognises that some of the lower tier settlements in the appraisal have a geographical and functional relationship with a Tier 1 settlement in the matrix and so, whilst achieving lower scores, may be capable of supporting some additional future development. The settlements along the M4 corridor in particular exhibit strong geographical and functional relationships with both each other and with the larger settlements in the vicinity. This cluster not only contains the Tier 1

Primary Settlement of Caldicot it also contains the three Tier 2 Secondary Settlements of Magor Undy, Rogiet and Caerwent. It is considered that after the Primary Settlements of Abergavenny, Chepstow and Monmouth, the Severnside cluster with its good transport links, employment opportunities and range of services offers the most sustainable location for future growth.

- 10.6 Outside of the Primary, Secondary and Severnside settlements there are other settlements in the matrix that will also provide supplementary opportunities for sustainable development; again the scale of development should reflect their individual roles, functions and size. It is recognised, as set out in national planning policy (PPW10), that appropriate levels of development could help maintain the viability of these settlements by providing increased custom for local businesses and also enable small scale employment opportunities to help sustain their populations and attract a more balanced demography.
- 10.7 As well as having functional relationships with other settlements within the County, the settlements along the western boundary of the County, in particular Penperlleni Little Mill and Magor Undy also have strong links to settlements within Torfaen and Newport respectively in terms of access to services, public transport and employment. These links also need to be recognised when considering possible locations for future growth.
- 10.8 In summary this assessment evidences a hierarchy of settlements based on this quantitative analysis of the 3 principles together with settlement size. There are four Primary Settlements: Abergavenny (including Llanfoist), Chepstow, Monmouth (including Wyesham) and Caldicot. In addition, whilst a Primary Settlement in its own right, there is a cluster of Secondary and lower tier settlements around Caldicot forming the Severnside Area. Outside of these are the three identifiable Secondary Settlements of Penperlleni, Raglan and Usk.
- 10.9 The results from the appraisal are less clear in the rural areas where the scoring can lead to some settlements achieving higher scores than would be expected. Three notable examples of this are Penpergwm, The Bryn and Cuckoos Row which, whilst having limited services, benefit from the availability of an employment opportunity. As the employment opportunity is not weighted dependent on the number of jobs available a level of local knowledge has been applied with regard to the location of rural settlements within the hierarchy.
- 10.10 The proposed settlement hierarchy for the RLDP is given below, this will be subject to further refinement as the Plan progresses.

Primary Settlements

Abergavenny (including Llanfoist)

Chepstow

Monmouth (including Wyesham)

Severnside

Caldicot
Caerwent
Crick
Magor Undy

Portskewett
Rogiet
Sudbrook

Secondary Settlements

Penperlleni
Raglan
Usk

Main Rural Settlements

Devauden
Dingestow
Grosmont
Little Mill
Llandogo
Llanellen
Llangybi
Llanishen

Mathern
Penallt
Pwllmeyric
Shirenewton Mynydd bach
St Arvans
Trellech
Werngifford Pandy

Minor Rural Settlements

Bettws Newydd
Broadstone/Catbrook
Brynygwenin
Coed y Paen
Cross Ash
Cuckoo's Row
Great Oak
Gwehelog
Llanarth
Llanddewi Rhydderch
Llandegveth
Llandenny
Llangwm

Llanover
Llansoy
Llantilio Crossenny
Llantrisant
Llanvair Kilgeddin
Llanvair Discoed
Llanvapley
Mitchel Troy
Penpergwm
The Bryn
The Narth
Tintern
Tredunnoch

11. Further Analysis

- 11.1 The assessment evidences a hierarchy that can be used to identify which settlements are most sustainable and are best placed to deliver further growth. This will inform the Preferred Strategy of the RLDP. However, whilst providing the Council with an initial quantitative ranking of the sustainability of the County's settlements it is important to note that the use of scoring and ranking methods means that certain socio-economic, cultural and environmental factors, which are important in understanding the overall role, function and sustainability of a settlement are not fully considered by this assessment. Furthermore, the limitations of this methodology mean that certain assumptions and generalisations are used, for example regarding travel to work patterns and the actual use of sustainable transport modes.

- 11.2 A strategic assessment such as this one is not intended to be a comprehensive planning assessment of individual settlements or potential development sites within them. Further analysis will be needed to take account of qualitative considerations and wider planning assessments, including Council aspirations, the potential future role of each settlement, affordable housing need and capacity to accommodate development. This will enable a better understanding of the initial rankings and provide a basis for defining a final sustainable settlement hierarchy for the Deposit RLDP i.e. defining which settlements are more or less suitable for accommodating future development in terms of their location, level of service provision, capacity and their role and function within the area.
- 11.3 Wider planning assessments will also consider the local need for development, for example in terms of the need for local housing, affordable housing or employment provision, balanced against the physical/environmental and infrastructure constraints of individual settlements and their ability to accommodate additional development given the sensitivity of landscapes, the countryside character of rural settlements, and agricultural land quality. In this respect, planning judgements will need to be made as to which settlements fall within particular categories within the RLDP's sustainable settlement hierarchy. Given that these will reflect the individual characteristics of each settlement, it is likely that some of these may not strictly reflect the indicative groupings provided in this assessment. An example of the other planning considerations would include environmental constraints such as flood risk, nature conservation, topography, and landscape impacts, as well as infrastructure capacity.