

# Settlement Hierarchy assessment

September 21

# 2018

---

The role and function of settlements in the Forest of Dean District,  
Gloucestershire, United Kingdom

Forest of  
Dean District  
Council

## Contents

Introduction .....	2
Past iterations .....	3
Policy Framework.....	3
Methodology.....	6
About Forest of Dean District .....	10
Demographics .....	10
Regional settlement pattern .....	12
Forest of Dean settlements.....	8
Functional relationships.....	15
Services and facilities .....	18
Employment by location .....	22
Housing need .....	26
Travel patterns and accessibility.....	28
Car travel.....	28
Significance .....	32
Environmental constraints.....	35
Centre by Centre assessment .....	37
Market towns.....	37
Cinderford .....	37
Coleford.....	38
Lydney .....	39
Newent.....	40
Large villages.....	41
Bream .....	41
Drybrook .....	41
Lydbrook .....	42
Mitcheldean .....	43
Tutshill/ Sedbury .....	44
Whitcroft/ Pillowell/ Yorkley .....	45
Conclusion.....	46
References .....	48
Acronyms .....	48
APPENDIX 1: Services ratings for sixty centres .....	0

## Introduction

The Forest of Dean District includes a network of settlements diverse in size and function, which interact both economically and socially. The role of each settlement, as well as the relationships between them, must be carefully considered in order to strategically plan for future population growth, ensuring development occurs in areas where infrastructure and services are able to support growing communities.

This assessment of the district's Settlement Hierarchy supports the Forest of Dean's Local Development Framework by providing evidence upon which to determine role and function of Forest of Dean's network of settlements, and the interrelationships between them. This evidence will assist decision making by identifying centres that have the functions and capacity to support growth, and ensure development avoids the ones that don't, while protecting ecologically and culturally sensitive and valuable places.

Land use planning is based on the basic premise that development should be sustainable. Planning can promote sustainability by maintaining compact and well-designed urban centres, and protecting the countryside by preventing development encroaching into valuable open space, natural areas and productive, agricultural land. The Forest of Dean District Council's planning framework provides a local context for sustainable development, in relation to the district's places, functions and values.

Sustainability can be described in terms of all economic, environmental and social aspects. With respect to the Settlement Hierarchy, the word sustainability specifically refers to the degree to which each settlement is self-contained in terms of employment, services and transport accessibility.

Therefore, the purpose of this document is to:

1. Establish an evidence base through the assessment of available data on the role and function of settlements in the Forest of Dean District;
2. Build on previous Settlement Hierarchy Assessments undertaken for the Forest of Dean District in 1990, 2007 & 2011;
3. Analyse the relationships between settlements, and identify groups or hubs of settlements that are interlinked in terms of social networks, shared employment and services and local identity;
4. Identify the settlements that act as rural service centres for their surrounding area

This assessment will provide a district scale overview which indicates which centres could offer suitable locations for accommodating the future growth requirements for the Forest of Dean District.

For the purposes of this study, the following parameters have been adopted:

- Settlements of less than 20 houses & estimated populations of not more than 50 people are excluded from the review. These are considered to be small hamlets, which for the purposes of planning are part of the open countryside (Source: Rural Settlements of Forest of Dean; 1990);

- Functional relationships between centres are referred to as “hubs”;
- Several settlements that share a settlement boundary and have a continuous form; namely Tutshill/ Sedbury, Staunton/ Corse and Whitecroft/ Pillowell/ Yorkley.

## Past iterations

This Settlement Hierarchy reviews and updates previous Settlement Hierarchy documents published in 2011 and 2007, and the Rural Settlements Study prepared by the Forest of Dean Council in 1982 and reviewed in 1990. This current iteration of the Settlement Hierarchy will assess new evidence, track trends and change over the intervening period, and test old assumptions about the way settlement patterns will progress into the future. The results will assist potential re-assessment of housing projections for each centre, which may have implications for the Allocations Plan.

## Policy Framework

One of the primary aims of the Local Development Framework is to promote sustainable communities by consolidating existing urban form, maintaining or increasing the viability of settlements by bringing housing, jobs and services closer together.

This Settlement Hierarchy must take into account the over-arching national and local policy context, including:

- The National Planning Policy Framework (NPPF);
- The Planning Practice Guidance;
- Gloucestershire Local Transport Plan (2015-2031);
- Core Strategy - Adopted Version (February 2012) Forest of Dean District Council;
- Allocations Plan - Adopted version (July 2018) Forest of Dean District Council.

Settlements in protected areas are constrained by protected area designations such as Areas of Outstanding Natural Beauty (AONB), Conservation areas, Special Areas of Conservation (SACs), Sites of Special Scientific Interest (SSSIs), flood zones and heritage assets such as Conservation Areas. The impact of any new development in protected areas needs to be carefully considered, appropriately scaled and based upon identified local need, as detailed in the management plans and guidance for the protected area. These aspects are explained in more detail in the Environmental constraints section (page 34).

The National Planning Policy Framework (NPPF) sets out the central government’s policies for planning and stipulates how these should be applied by local authorities across England. Any planning policy and associated evidence base must be developed within this framework, including this study.

The parts of the NPPF which relate to a Settlement Hierarchy include:

Part	Relevant clauses
Achieving sustainable development	<i>At a high level, the objective of sustainable development can be summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs....At the heart of the Framework is a presumption in favour of sustainable development.</i>
Maintaining supply &	<i>The strategic policies required for the area of each local planning authority should include those</i>

delivery	<p><i>policies, and strategic site allocations, necessary to provide:</i></p> <ul style="list-style-type: none"> <li><i>a) An overall strategy for the pattern and scale of development;</i></li> <li><i>b) The homes and workplaces needed, including affordable housing;</i></li> <li><i>c) Appropriate retail, leisure and other commercial development.</i></li> </ul> <p><i>Strategic policies should look ahead over a minimum 15 year period from adoption, to anticipate and respond to long-term requirements and opportunities, such as those arising from major improvements in infrastructure.</i></p>
Maintaining supply and delivery	<p><i>Local planning authorities should identify and update annually a supply of specific deliverable sites sufficient to provide a minimum of five years' worth of housing against their housing requirement, or against their local housing need where the strategic plan is more than five years old.</i></p>
Ensuring the vitality of town centres	<p><i>Planning policies should:</i></p> <ul style="list-style-type: none"> <li><i>a) Define a network and hierarchy of town centres and promote their long-term vitality and viability- by allowing them to grow and change in a way that supports a diverse retail offer, provides customer choice, allows a suitable mix of uses (including housing) and reflects their distinctive characters.</i></li> <li><i>f) Recognise that residential development often plays an important role in ensuring the vitality of centres and encourage residential development on appropriate sites;</i></li> <li><i>g) Support diversification and changes of use where town centres are in decline, as part of a clear strategy for their future, while avoiding the unnecessary loss of facilities that are important for meeting the community's day-to-day needs.</i></li> </ul>
Promoting sustainable transport	<p><i>Significant development should be focussed on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making.</i></p> <p><i>Planning policies should....support an appropriate mix of uses across an area, and within strategic sites, to minimise the number and length of journeys needed for employment, shopping, leisure, education and other activities.</i></p>
Making effective use of land	<p><i>Planning policies and decisions should promote an effective use of land in meeting the need for homes and other uses, while safeguarding and improving the environment and ensuring safe and healthy living conditions.</i></p> <p><i>Planning policies and decisions need to reflect changes in the demand for land. They should be informed by regular reviews of both the land allowed for development in plans, and of land availability.</i></p>

TABLE 1: Relevant clause of the National Planning Policy Framework 2018

The Settlement Hierarchy also seeks to support the fulfilment of the stated objectives of the Forest of Dean District Core Strategy (2012), which include:

1. *Maintaining and developing thriving and sustainable communities;*
2. *Providing quality environments throughout the district to protect the environment for the benefit of the community, and in order to attract and support new businesses;*
3. *Developing more self-contained and diverse local economies including tourism. This strategy includes addressing out-commuting and aims to enable more sustainable transport patterns,*

*as well as providing a greater range and number of jobs, and improving locally accessible services and facilities;*

- 4. Providing homes, including affordable homes, to meet the housing needs of the community;*
- 5. Facilitating regeneration to support a stronger more sustainable economy in a better quality environment;*
- 6. Creating safer communities with better facilities.*

## Methodology

This section provides a description and explanation of the methodology adopted for the study. This is explained in the following schematic:



The simplest kind of settlement “hierarchy” is a ranking from largest to smallest in terms of population size. Population can be a significant indicator as to the diversity and complexity of a particular settlement’s role(s) and function(s). However, it is only one aspect of a centre’s role and function.

There are three key things to consider when determining a settlement’s role and status within the hierarchy:

1. Service provision – where are the important clusters of retail and community services?
2. Employment – which settlements fulfil a strong employment role?
3. Accessibility – where are the most opportunities for sustainable travel and self-containment?

These considerations align with the following key questions provided by the Forest of Dean District Allocation Plan, as follows:

### **Accessibility**

*How easily can the development be accessed by modes other than private car? Are development proposals located to make the best use of existing facilities and services, and do they support local town service centres?*

### **Economy**

*How do development proposals support the economy of our towns and the rural economy?*

### **Community**

*How do development proposals support integrated, fair and diverse communities?  
How do proposals support the rural context of the district?*

To more fully understand each centre, an assessment has been made of all of the following elements:

1. Demographics;
2. Housing need;
3. Employment role;
4. Ease of travel to work, and access to services and facilities;
5. Availability of retail and community services and facilities within each centre;
6. Distribution of business activity through the district.

Analysis of these aspects alongside population size contributes to understanding the degree of self-containment at which each centre is currently operating. It also indicates which centres have the social, economic and transport infrastructure and capacity to support further growth without compromising the sustainable functioning of the district.

To this end, each centre is scored against weighted criteria for services, transport accessibility and employment areas.

Fifty centres in the Forest of Dean have been assessed through the following methods, relying on the information sources described below:

Method	Source
Ranked by population size	Two reference points were used for total district population- where available the mid-2017 estimate generated by the Office of National Statistics (ONS); the other source was by Council taxed properties within the built up area of each centre and then multiplied by 2.3, which is the average UK household population, to arrive at a total population for each centre.
Given a weighted score based on the number of business and community facilities they contain (See Appendix 1 for details)	The number of businesses and community facilities for each centre was established by interrogating a combination of Google maps, Wikipedia, online business directories, and then randomly cross referenced with anecdotal evidence from local residents. The 2017 town centre assessments for Coleford, Cinderford, Lydney and Newent were used for the four market towns.
Given a weighted score based on the quality of public transport provision	This information was generated by the team at MAIDeN, based at Gloucestershire County Council.
Assessed in terms of the location of the 57 biggest employment generators within the Forest of Dean District	57 large employment generators were within the area were identified and contacted to provide the number of employees they have.
Assessed regarding concentration of business rated properties in relation to each settlement	The number of business rated properties within the built up area of each centre was referred to.
Assessed current waiting list on affordable housing register based on location within the Forest of Dean District	Council's Housing Strategy & Enabling Officer provided figures for the number of entries on the affordable housing register, which included

	three preferred locations for each entry.
Assessed on the basis of environmental constraints around the existing settlement boundaries of each centre	A brief overview of which centres were constrained by environmental values and features.
Assessed in terms of qualitative significance criteria, relating to significant cultural and institutional status of each centre	Key questions developed by Roger Tyms (2005) regarding qualitative significance of each sentences were used as a framework for general discussion.

Table 2: Methods for assessment and associated information sources

## Forest of Dean settlements

For the purposes of this assessment, was arranged into cascading tiers of scale, to create a basic hierarchy of settlements, which provides a reference point and basis for comparison for further analysis. The settlement hierarchy of the Forest of Dean District has been arranged into five tiers, which is based purely on the population size of each centre:

<p><b>Tier 1: Market towns</b> Cinderford, Coleford, Lydney, Newent</p>
<p><b>Tier 2: Large villages</b> Bream, Drybrook, Lydbrook, Mitcheldean, Whitecroft/ Pillowell/ Yorkley, Tutshill/ Sedbury</p>
<p><b>Tier 3: Medium villages</b> Beachley, Blakeney, Huntley, Littledean, Longhope, Newnham, Ruardean, Sling, St Briavels, Staunton/ Corse, Woolaston</p>
<p><b>Tier 4: Small villages</b> Alvington, Aylburton, Brierley, Broad Oak, Brockweir, Clearwell, Cliffords Mesne, Dymock, Ellwood, Edge End, English Bicknor, Hartpury, Kempley Green, Parkend, Newland, Northwood Green, Oldcroft, Redbrook, Redmarley D’Abitot, Ruardean Hill, Ruardean Woodside, Staunton (Coleford), Soudley, Tibberton, Westbury upon Severn, Woodcroft, Bromsberrow Heath, Upleadon, Viney Hill</p>
<p><b>Tier 5: Hamlets</b> Birdwood, Blaisdon, Botloes Green, Chaxhill, Churcham, Etloe, Glasshouse/ May Hill, Gorsley, Hewelsfield, Highleadon, Upleadon, Kempley, Kilcot, Little London, Lowbands, Oakle Street, Taynton, The Pludds, Tidenham.</p>

Figure 1: Forest of Dean settlement arranged into tiers on the basis of size

To draw out some idiosyncrasies of the way the total settlement pattern operates, these colour coded tiers have been used to compare population size of each centre with other functions, such as retail offer, services, public transport and so on.

This study primarily focuses on the top four tiers. The top two of these are collectively defined as Rural Service Centres. There is no formal guidance on the definition of a Rural Service Centre, so for the purposes of this report they are defined as settlements capable of accommodating a degree of

self-containment by having a range of services broad enough to fulfil the day to day needs of residents. In the current local planning framework for the Forest of Dean district, all centres in the top three tiers have a defined settlement boundary.

Generally speaking, Rural Service Centres should include:

1. An employment site, or lie within 5km of an employment site;
2. Good public transport accessibility;
3. All five of the key daily services: primary school, post office, village hall, pub and shop.

There may be exceptions to this rule- however, if one criterion is absent, it should be compensated for by another element to qualify as a Rural Service Centre.

Tier 3, 4 & 5 identifies a number of much smaller settlements. These settlements do not have the same range of public transport or local facilities as main settlements, but do provide some facilities and/ or services to the local area. Homes sporadically located in the open countryside which have traditionally been tied to agricultural land use effectively form a fifth tier to the settlement pattern. While there may be some minor and isolated opportunities for infilling within these settlements, they have not been included within a settlement boundary, due to their clear lack of capacity for self-containment.

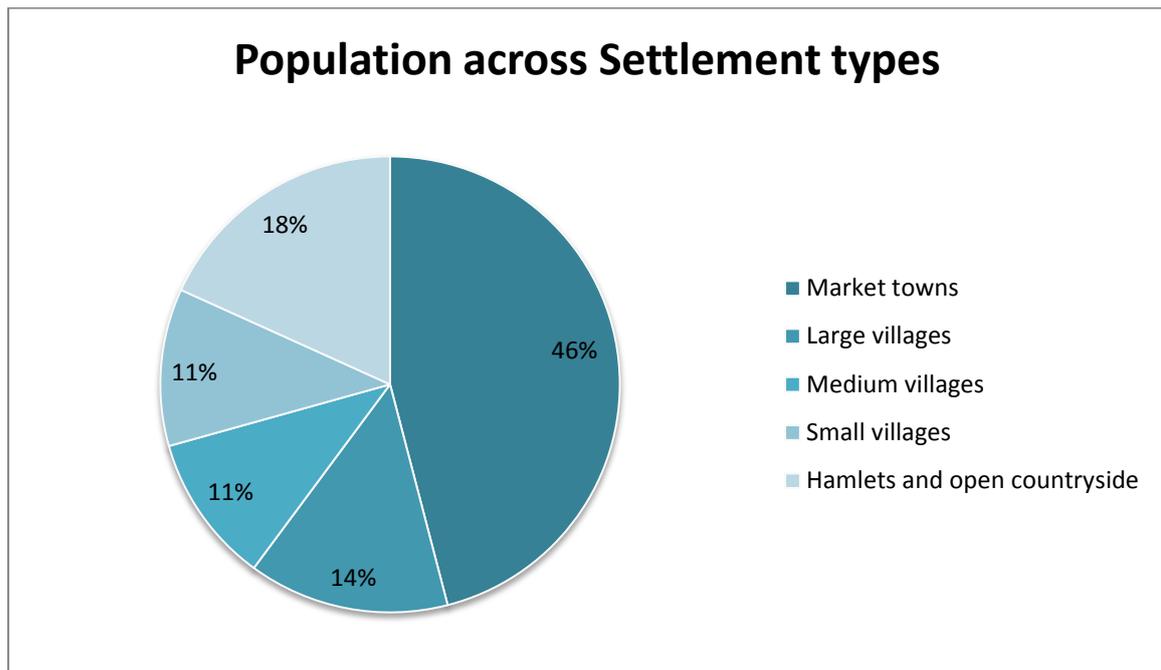


Figure 2: Population weightings across settlement types in Forest of Dean district

The pie chart above demonstrates how the population of the Forest of Dean district is arranged over the different settlement types. It illustrates a clear domination of the four market towns which collectively account for almost half of the total district population, which is a trend that is set to continue.

## About Forest of Dean District

### Demographics

The Forest of Dean District is the most western district of Gloucestershire, bordering Monmouthshire in Wales. It covers a land area of 526.29 km<sup>2</sup> is geographically defined by the Wye River to the west and the Severn River to the east, with a large protected forest reserve in the centre known as the Royal Forest of Dean.

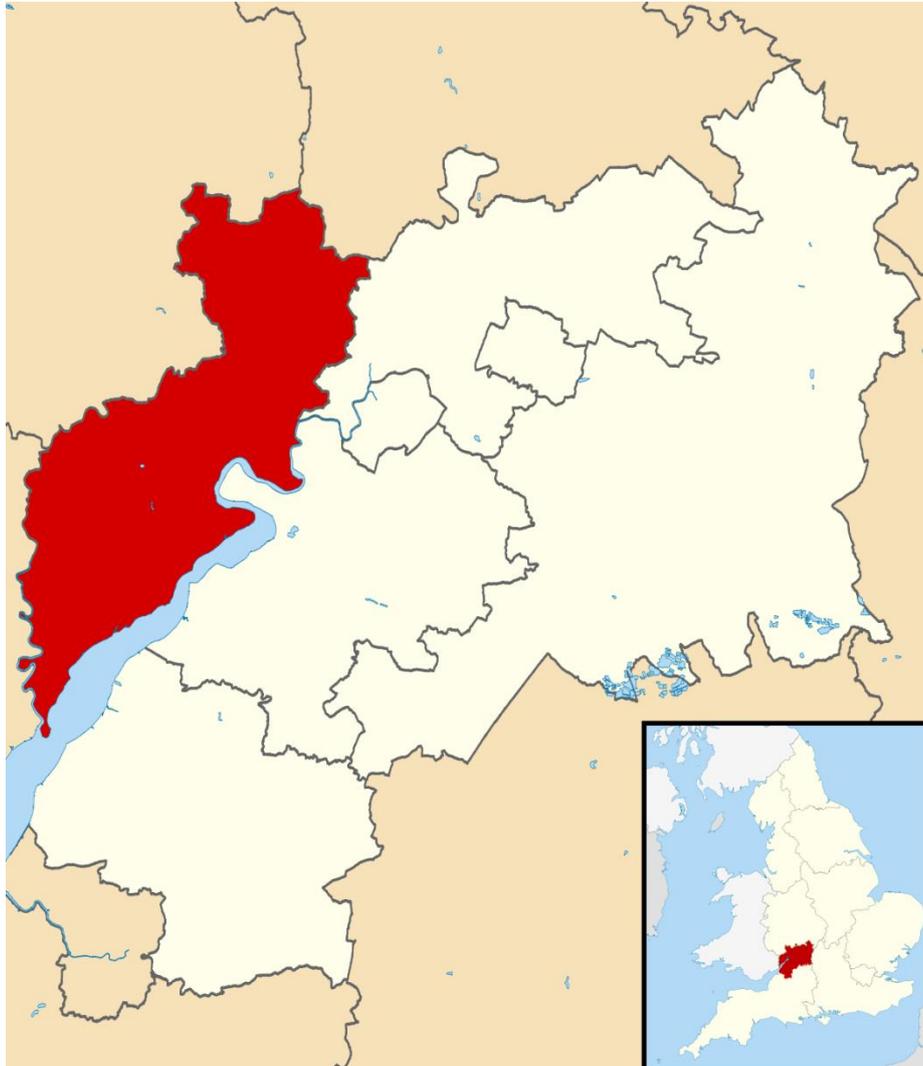


Figure 3: Forest of Dean District (red) within the context of Gloucestershire County (beige).

Name	Geography	Area (sq km)	Estimated Population mid-2017	2017 people per sq. km	Estimated Population mid-2016	2016 people per sq. km
Forest of Dean	Non-metropolitan District	526.29	85,957	163	85,411	162

Table 3: Forest of Dean District population density.

Source: Office of National Statistics, 2017

With a total district population of 85,411 (ONS; mid-2017 estimate) the Forest of Dean has the second lowest population in Gloucestershire (ONS; 2017 & GCC; 2016). Of this figure, 42,280 are classed as “non-metropolitan” by the ONS (2017). According to the DEFRA urban/ rural

classifications, the Forest’s population is 95% rural, making it the second most rural district in Gloucestershire after the Cotswolds (Source: GCC, 2015).

Name	Geography <sup>1</sup>	Estimated Population mid-2016	Births	Deaths	Births minus Deaths	Internal Migration Inflow	Internal Migration Outflow	Internal Migration Net
Forest of Dean	Non-metropolitan District	85,411	791	981	-190	4,650	4,062	588

Table 4: Population status of Forest of Dean.  
Source: Office of National Statistics, 2017

The Forest of Dean District is slowly but steadily growing. The population change from 2006 to 2016 was an additional 3,700 people- taking the district from a total population of 81,700 to 85,400-which represents a 4.5% increase over this ten year period. This is low compared to Gloucestershire and the UK which increased by 7.3% and 8.2% respectively in the same decade (Inform Gloucestershire: 2017). However the population has maintained steady growth which is projected to continue, necessitating new land for housing allocations into the foreseeable future. The district population is projected to increase to 86,800 by 2025 and 89,900 by 2037 (Gloucestershire County Council; 2015). The objectively assessed need calculated for the district is currently 330 new houses per annum to accommodate this growth (FoD Allocations Plan: 2018).

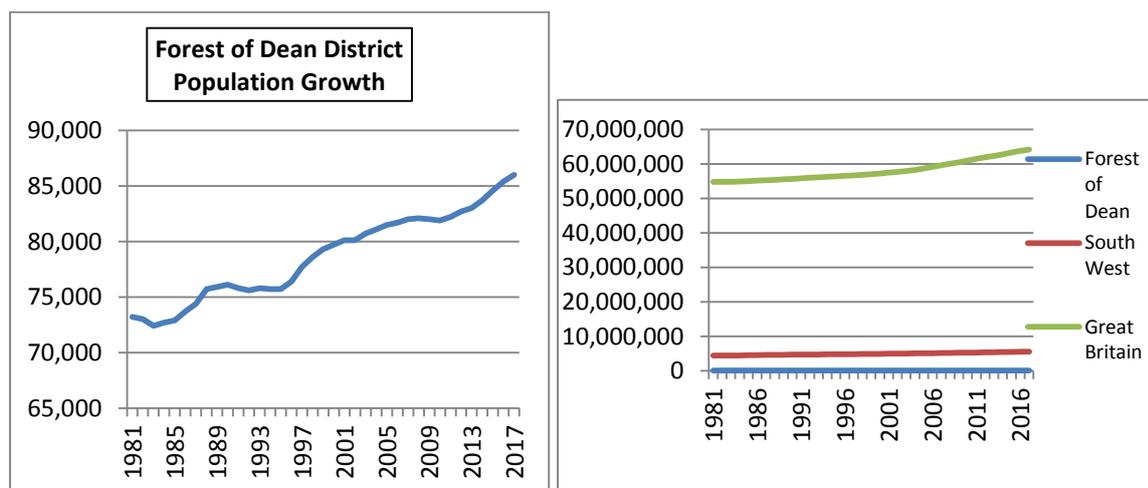


Figure 4: Forest of Dean District Population growth from 1981-2017/

Figure 5: Forest of Dean population growth compared to the South-west region and Great Britain

Source: Office of National Statistics 2017

While the population continues to grow, within the community there is a marked population change towards an aging population, in line with trends across the western world. The following tables illustrate how stark this trend is in the Forest of Dean, which is above the UK national averages. The UK median age in 2017 was estimated to be 40, compared to 48 for Forest of Dean district. This will impact on the form and scale of the development that is required to support future housing provision throughout the district.

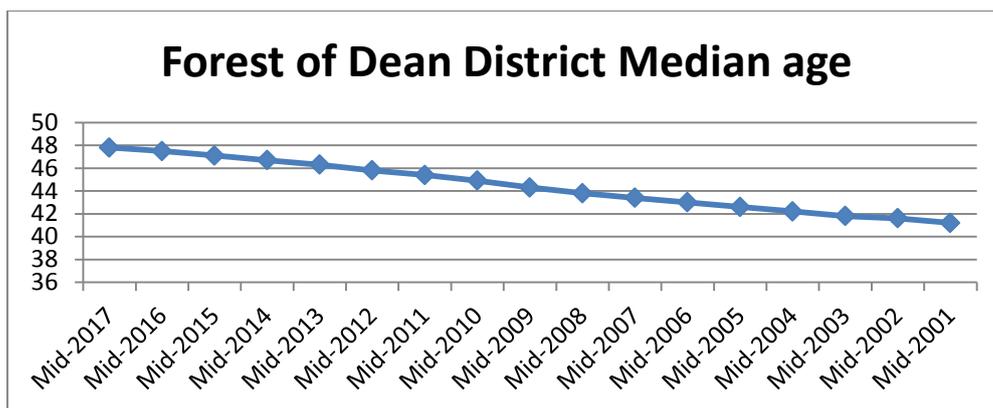


Figure 6: Forest of Dean median age from mid-2001 to mid-2017  
 Source: Office of National Statistics 2017

Forest of Dean % population change in the Gloucestershire district by broad age group from 2006-2016		
0-19	20-64	65+
-4.2%	-1.5%	+34.7%

Table 5: Forest of Dean district population change 2006-2016  
 Source: Information Gloucestershire, September 2017

### Regional settlement pattern

Population growth tends to focus on expanding larger centres for employment and housing, thus minimising travel needs and infrastructure costs. However it is acknowledged that a significant proportion of the existing population live in rural areas, which provide an attractive location for new residents who move to the area for lifestyle reasons. These areas are typified by a large number of villages orientated towards “market towns” that are the centre of valuable cultural, community and economic activities, and provide necessary services to rural areas.

These market towns and the loose networks of surrounding settlements define the fundamental settlement pattern of the Forest of Dean district, which has been informed by its industrial past and unique natural history.

Gloucestershire lies in the northern part of the south-west region of England, and the Forest of Dean district is separated from the south-west peninsula by the Severn River. Much of the district relies on Gloucester for high-level services and employment opportunities, and to a lesser extent Cheltenham. The Forest of Dean is also influenced by centres outside of Gloucestershire, such as Bristol, Newport, Cardiff and Hereford, as well as smaller centres such as Ledbury, Ross on Wye, Monmouth, Chepstow and Newport, in a network of complex travel patterns and inter-relationships.

Bristol has been clearly identified as the regional centre of south west England, with a population estimate of 456,000. Bristol does not dominate the south west like core cities in other regions, but does form an important part of the regional settlement pattern. It is the location of it’s the two major strategic ports of South-west England; the Bristol International Airport is the region’s principal airport, and the Bristol port is the largest freight handling port in the south-west. Bristol exerts a strong influence over the southern and central parts of the Forest of Dean district, particularly Tutshill & Sedbury, extending up to Lydney.

The Northern parts of the district are more influenced by Gloucester and to a lesser extent Cheltenham. There is also some out-commuting into Welsh centres of Newport and Cardiff. Bristol

has been described as an advantaged urban area, whereas Gloucester is described as a challenged urban area in the “Developing a Town and City Indicators database” (Tyms; 2003).

The settlement pattern of Forest of Dean is dominated by four market towns which provide the main services and employment centres for the district, and collectively these account for 46% of the total district population. These towns complement and interact in many ways, including:

1. **Coleford**; the administrative centre of the district, located in its western side;
2. **Cinderford**; which was the industrial heart of the Forest of Dean, and is currently the focus of a major regeneration project in its Northern Quarter;
3. **Lydney**; situated on the banks of the river Severn and connected to the national rail network;
4. **Newent**; which is an attractive and lively market town servicing the north of the District.

This dominant settlement pattern is recognised and supported in the FoD Core Strategy (2012) vision:

*The Forest of Dean will be a thriving sustainable community with a high quality environment, a developing local economy including tourism, housing which meets the needs of residents (including affordable homes) and safer communities.*

*The existing complementary nature of the three southern forest towns will be reinforced to ensure Coleford, Lydney and Cinderford work together with their hinterlands to provide a more sustainable future. Much of the planned change will be in the towns, especially Lydney and Cinderford, with improved shopping and services meeting the needs of the existing and new population. Improved town centres, services and a wider range of employment will reduce commuting and other journeys. Newent will become a more effective local centre through improvements in the centre and additional employment. The quality of the countryside and the built environment will be maintained through the careful promotion of the economy, and safeguarding of the landscape.*

This statement reflects a firm commitment from the Forest of Dean District Council to maintaining and consolidating the role and function of the four main market towns- Cinderford, Coleford, Lydney and Newent. This Settlement Hierarchy will support this vision and existing settlement pattern with an evidence base that re-examines the role of the four main centres in relation to each other, as well providing a next layer of analysis in terms of the network of villages and functional relationships between rural service centres.

In past planning exercises, this settlement pattern can be loosely defined as North-east/ Central core/ South-west sub-regions or catchments, as per the Figure 4 (page over). While this orientation of settlements to three, broad, loosely defined sub catchments still remains relevant, there are many trends and settlement patterns occurring within this which require substantiation, some of which disrupt and contradict the overview.

The Core Strategy (page 12) provides a more recent reference to these three broad sub-catchments in the following statement:

The Forest of Dean can be divided into three; the Forest core and areas to its north and south. Although this treatment initially appears arbitrary, there are some clear difference between the traditional Forest “core” with its more pronounced industrial history and the other two areas. There are contrasting landscape types and the settlements themselves are quite distinct and different. The main reasons for this contrast becomes clear if the nature and origins of the towns and villages, still plainly apparent, are considered.

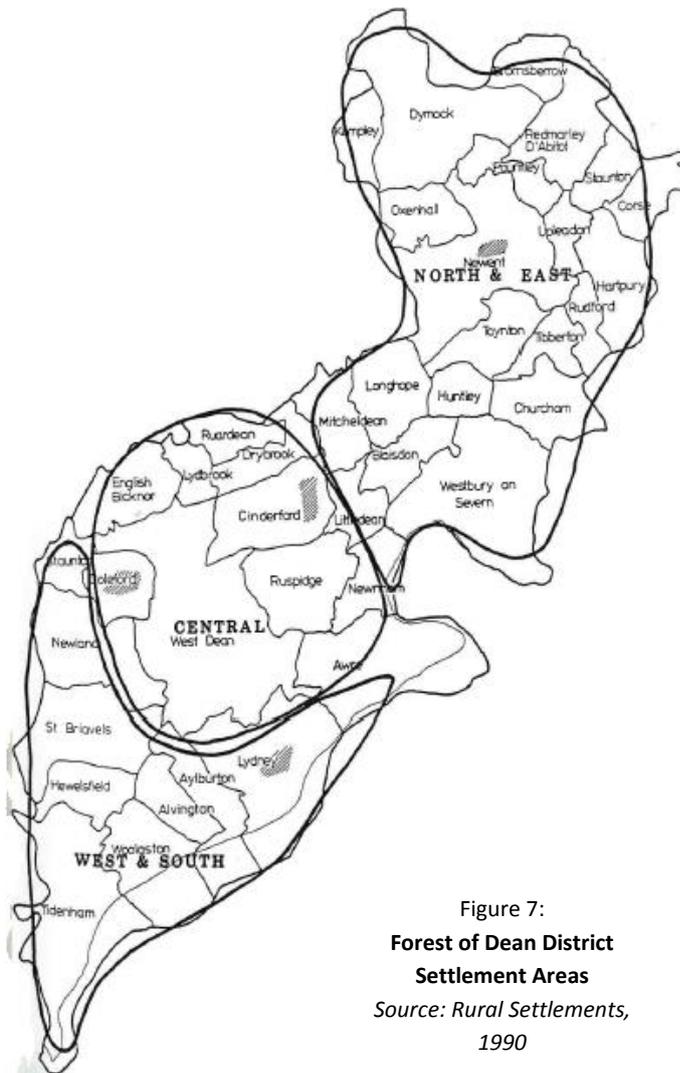


Figure 7:  
**Forest of Dean District  
 Settlement Areas**  
 Source: *Rural Settlements,*  
 1990

While the importance of the four market towns has been constant, the settlement pattern has changed in both subtle and overt ways. The arterial road network exerts a strong influence over how residents interact with their districts and their settlements. Local services have decreased as private car ownership has increased, to the point where even large villages lack many basic services. Sub catchments within districts are mostly defined by the shortest arterial route to the closest major centre, often outside of the district in the wider south-west region.

Centres along major road corridors in particular often have high car-borne out-commuting. This pattern will change their form and function incrementally over time. In the case of the Forest of Dean District, this particularly relates to Newent and its proximity to the M50 corridor, as well as the Tutshill/ Sedbury hub which is a functional part of Chepstow, and very influenced by its proximity to the Severn Bridge with its direct access to Bristol.

## Functional relationships

For the purposes of this study, ‘hubs’ are defined as the network of interdependent functional relationships between smaller settlements which fulfil each other’s needs. Many of these smaller centres evolved as independent villages, but due to their proximity to a larger centre, they have been consumed and become functionally dependant. A settlement can share certain key services with another settlement or main town within an approximate radius of 5km. Market towns and rural settlements do not exist in isolation, but rather, are dependent on each other for labour, housing, employment and services.

In relation to a settlement hierarchy, a centre’s status may be elevated by how many satellite communities it supports through service provision.

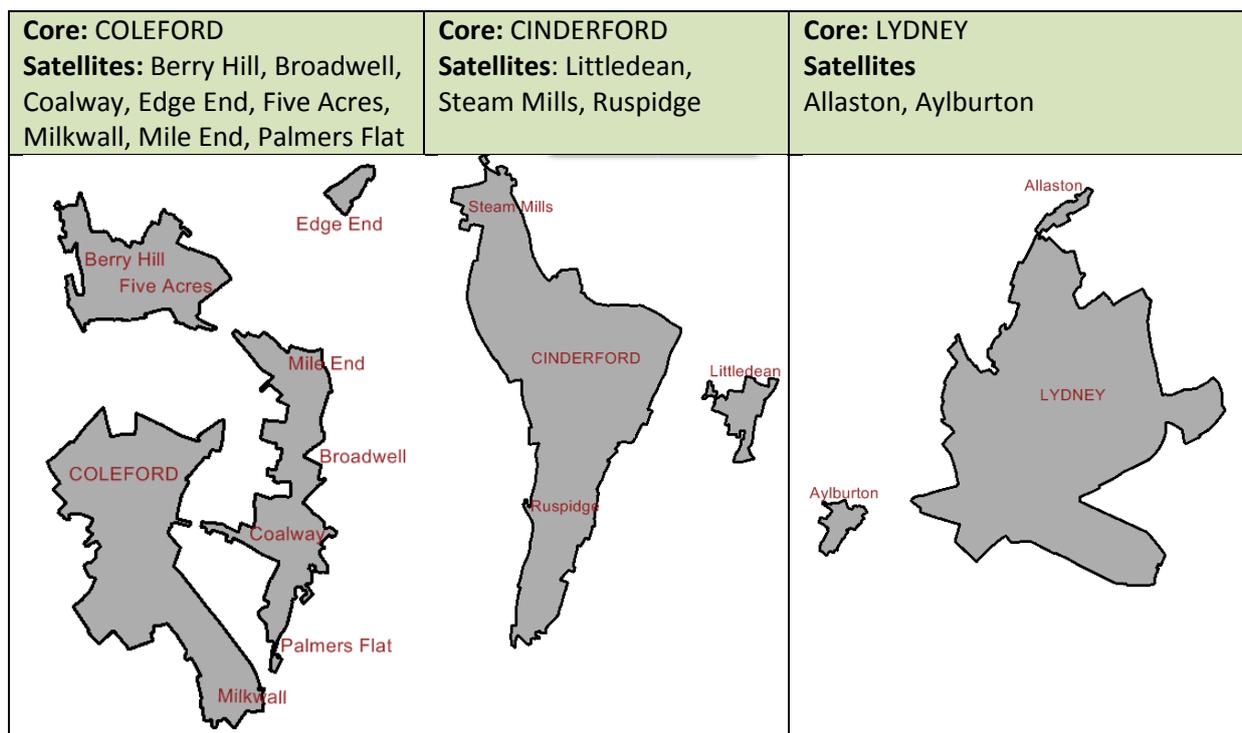


Figure 8: Core and satellite centres which form functional hubs for Coleford, Cinderford and Lydney

These maps depict the urban areas within the current defined settlement boundary for various centres, in an attempt to illustrate their role in supporting smaller outlying urban areas.

Coleford supports a many smaller satellites which have a clear, functional relationship with its town centre. This is one factor which positions Coleford in a stronger position to accommodate future growth, despite having a smaller population than its counterparts of Lydney and Cinderford. For this study, Coleford has been defined to include Berry Hill, Five Acres, Milkwall, Mile End, Broadwell, Coalway and Palmers Flat. Collectively, this makes the Coleford hub the largest population centre in the Forest of Dean, whilst Coleford town (as defined by its settlement boundary) is the third largest after Cinderford and Lydney.

To a lesser degree, the market towns of Cinderford and Lydney all support some satellite centres which are either attached or in close proximity to them. This will have a great influence on how services, employment and travel patterns function within these hubs, and the satellites will typically have less services and self-containment than a more isolated village, but also promote a more

sustainable pattern of land use as accessibility within these hubs will be higher, and travel distances lower.

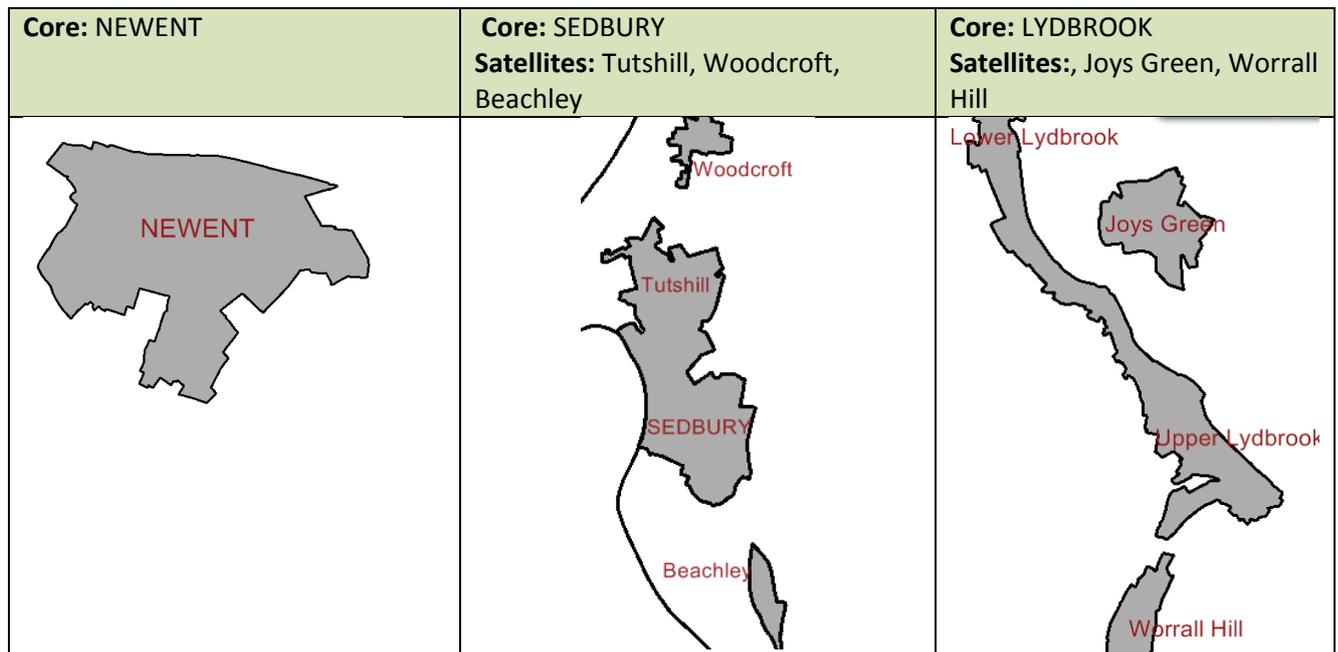


Figure 9: Core and satellite centres which form functional hubs for Newent, Tutshill/ Sedbury & Lydbrook

All market towns will play a role in supporting their immediate, rural districts, however in terms of urban form Newent does not have any areas that are within the settlement boundaries. Newent has several small settlements in its vicinity but none are large enough to support a settlement boundary.

The district's other key hub is focused on Tutshill/ Sedbury, which supports the smaller outlying communities of Woodcroft and Beachley. These communities have a strong relationship with the adjoining town of Chepstow, Monmouthshire, and are likely to identify much more closely as part of the Chepstow community than they are with the Forest of Dean.

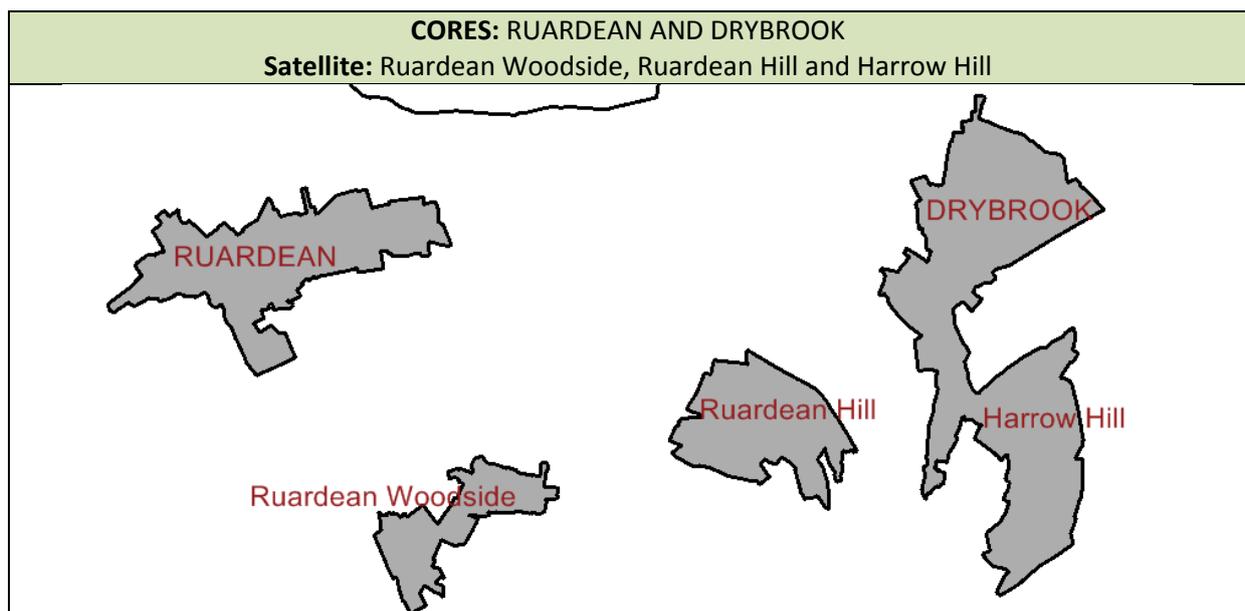


Figure 10: Core and satellite centres which form functional hubs for Newent, Tutshill/ Sedbury & Lydbrook

The smaller communities of Lydbrook, Ruardean and Drybrook all have outlying centres, which form a loosely defined network of communities adjacent to each other. Ruardean is a loose, sprawling hub which covers a large area with links to Lydbrook to the west and Drybrook to the east.

Many of these hubs form a wider settlement pattern which has informally been referred to as the “Forest ring” - which is been described in the FoD Core Strategy (page 13) as the following:

*The most striking feature of the settlement pattern is the nearly continuous ring of settlements which sit on the edge of the coal outcrop which was once the basis for one of the area’s main industries. This “forest ring” is close to or includes the three main towns. It also includes a number of quite large villages which themselves have a clear role in providing services for their surroundings.*

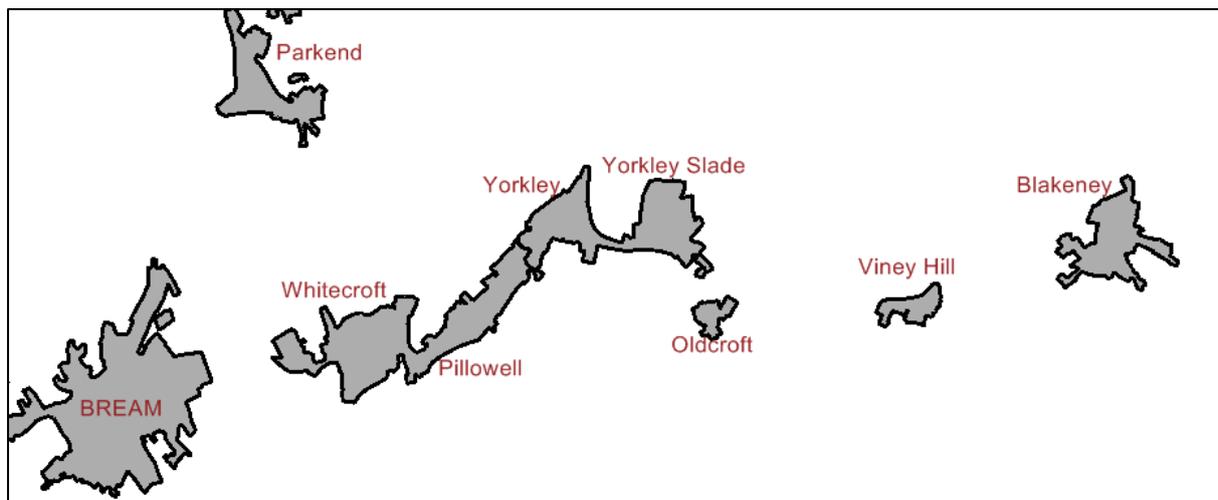


Figure 11: Core and satellite centres which form functional hubs for Newent, Tutshill/ Sedbury & Lydbrook

This unique configuration is most well defined in relation to the almost continuous string of settlements which are Bream/ Whitecroft/ Pillowell/ Yorkley/ Yorkley Slade/ Oldcroft/ Viney Hill/ Blakeney, depicted above. North of this string lies Parkend, and collectively these communities have many shared internal functions and linkages. For the purposes of this study, Whitecroft/ Pillowell/ Yorkley & Yorkley Slade have been treated as one settlement. This hub roughly aligns with the Pillowell ward for data analysis purposes.

The hubs centred on Coleford, Cinderford, Drybrook, Lydney, Lydbrook and Ruardean all form part of this loosely defined Forest ring. These define the centre of the Forest of Dean district.

To the north of the district there is a lack of bigger settlements with the exception of Newent, and there is a looser relationship and settlement pattern between villages. The southern part of the district includes Tutshill/ Sedbury and Lydney has a much stronger relationship with centres outside the district such as Bristol and Chepstow, and are well positioned for market growth due to this proximity.

These smaller outliers relate to larger centres; however collectively most of the district functions as a tight network- particularly in the core and southern areas. Travel patterns highlight a great deal of interdependence between the key centres, especially Cinderford, Coleford and Lydney which effectively operate as a functional network. This is described in the following extract from the

*Functional Analysis of Settlements* prepared for the South West Regional Assembly by Roger Tym and Partners in 2005:

***Inter-relationships: Cinderford, Coleford and Lydney***

These three towns differ significantly from other settlements in the greater South-west region due to their relative isolation from major infrastructure. They are all small towns and this is an important feature to stress, particularly in relation to the scale of travel to work journeys, compared to say, the Cornish towns who also display a similar local functional network. Cinderford and Coleford are both under 50% self-contained. The figure is not available for Lydney which is a slight net importer.

Every day the three towns exchange 1382 employees, over 10% of their entire combined working population. The patterning for the towns-as-destinations is not greatly changed, though the links to Cheltenham and Gloucester become weaker depending on the centre.

Both the origin and destination mapping clearly show the complex, yet localised, nature of commuting to and from the towns. Other smaller settlements and towns in Wales are all intimately involved. This forms a relatively tight network.

Thus, for these three towns there is a significantly different travel to work dynamic. They are not very self-contained, and have a fairly strong relationship with Gloucester. But beyond this there is a well-established, if complex, relatively local commuting pattern in place. This leads to the conclusion that growth in the three towns could be expected to reinforce such a pattern, and thus would be relatively sustainable, not from the perspective of freestanding individual towns, but from that of the tight local network.

Source: *South West Regional Assembly FUNCTIONAL ANALYSIS OF SETTLEMENTS. Roger Tyms & partners, March 2005.*

While this source is old, this functional network between the three market towns still exists, while the fourth market town of Newent operates in isolation to it. Tutshill/ Sedbury is the next largest population centre in the district, but this varies from the prevailing settlement pattern of the Forest of Dean district, in that it is effectively a suburb of Chepstow.

For the purposes of this assessment the following centres include these satellites, to form key “hubs” of the district:

<b>CENTRE</b>	<b>SATELITE</b>
Cinderford	Ruspidge, Steam Mills
Coleford	Berry Hill, Five Acres, Mile end, Broadwell, Coalway, Milkwall & Palmers Flat
Drybrook	Harrow Hill
Lydbrook	Lower Lydbrook, Upper Lydbrook, Joys Green, Worrall Hill
Lydney	Allaston

*Table 6: Centres and their satellites*

## **Services and facilities**

Retail centres are important not only in terms of providing goods and services, but also in providing a basis for social activity and supporting the cultural life of each community.

The following table provides a ranking of settlement size in terms of retail services, community facilities and businesses located within each of the fifty centres, which is compared with their ranking in relation to population size. The services score was calculated by assigning a score of 3 for core services (convenience store, pub, village hall, primary school, post office, peak and off-peak public transport, and a smaller score of 1 to a range of other retail, community and professional services (See Appendix 1 for details). This assessment produced the following results:

Population size	CENTRE	CENTRE	Services rating
12121	Coleford	Lydney	218
11919	Cinderford	Coleford	199
9497	Lydney	Cinderford	179
5722	Newent	Newent	124
3737	Tutshill/ Sedbury	Lydbrook	41
3105	Bream	Whitecroft/ Pillowell/ Yorkley	38
2686	Mitcheldean	Tutshill/ Sedbury	37
1967	Lydbrook	Newnham	26
1645	Drybrook	Drybrook	25
1281	Whitecroft/ Pillowell/ Yorkley	Mitcheldean	25
1251	Newnham	Bream	22
1212	Blakeney	Longhope	20
1182	Ruardean	Aylburton	18
1178	Woolaston	Huntley	18
1143	Huntley	Littledean	16
1134	Staunton/Corse	Blakeney	15
1074	Longhope	Woolaston	15
920	Sling	Redbrook	14
858	Beachley	St Briavels	13
800	Littledean	Westbury on Severn	12
734	St Briavels	Dymock	11
688	Dymock	Parkend	11
637	Tibberton	Ruardean	11
568	Ruardean Hill	Soudley	11
543	Parkend	Hartpury	10
531	Hartpury	Redmarley D'Abitot	10
511	Soudley	Sling	9
490	Ruardean Woodside	Staunton/Corse	9
485	Bromsberrow Heath	Ruardean Woodside	9
483	Aylburton	Alvington	8
423	Alvington	Brockweir	7
379	Redbrook	Bromsberrow Heath	7
338	Clearwell	Clearwell	7
336	Brockweir	Cliffords Mesne	7
319	Woodcroft	Staunton (near Coleford)	7
297	Staunton (near Coleford)	Tibberton	7
267	Oldcroft	Viney Hill	6
267	Viney Hill	Birdwood	5
248	Westbury upon Severn	Ellwood	5
239	Redmarley D'Abitot	Brierly	4

235	English Bicknor	English Bicknor	4
214	Northwood Green	Kempley Green	4
209	Ellwood	Newland	4
193	Cliffords Mesne	Beachley	3
168	Upleadon	Broadoak	3
159	Newland	Oldcroft	3
154	Brierley	Ruardean Hill	3
150	Edge End	Northwood Green	2
138	Kempley Green	Edge End	1
117	Broadoak	Woodcroft	0

Table 7: Ranking centres by service provision and population size

Source: Google maps. Wikipedia, online business directories, anecdotal evidence from local residents and 2017 town centre assessments for Coleford, Cinderford, Lydney and Newent.

Legend				
Tier 1 Market towns	Tier 2 Large villages	Tier 3 Medium villages	Tier 4 Small villages	Tier 5 Hamlets/ open countryside

The colour coding of this table reflects the population hierarchy illustrated in Figure 1 (page 8). It provides some comparison between the population size of each centre, and the cluster of services and community facilities there are located in each centre. This reveals the diversity in the functions and roles of each centre, and their status on a purely population based hierarchy.

This assessment clearly demonstrates that population size does not always equate to service provision. This can be due to a range of factors, such as depressed local economies like Cinderford, proximity to a larger centre such as Tutshill/ Sedbury or being located on a main arterial route with direct access to wider regional network of services such as Huntley.

There is a great deal of spill of retail trade to bigger centres outside of the district. The numbers below are an indication of how much local trade is lost from the Forest of Dean by residents accessing bigger centres to meet their needs. These statistics are now over a decade old, but it is likely that this trend has exacerbated since then, though no new data exists to verify this.

Centre	Retail footprint score	Market share lost to competing centres outside the SW region
Cinderford	11	30.8%
Coleford	5	30.6%
Lydney	12	22.4%

Table 8: Key centres and the retail status

Source: Baseline retail assessment of the regional/ sub-regional centres in the south west, Draft report, south west regional assembly, 2004. CACI property consulting.

The following map depicts retail catchments of the district, as identified in the Forest of Dean Retail Study Update published in 2011. This indicates key retail provision catchments throughout the areas, indicating that Newent, Ross on Wye, Cinderford, Coleford and Chepstow/ Monmouth provide the core retailers which people within the Forest of Dean district rely on for their shopping needs.

Catchment 7 which includes Westbury upon Severn and Newnham does not have a retail centre, but it is assumed that residents would rely on Gloucester and/or Lydney, due to the route of the A48 road corridor.

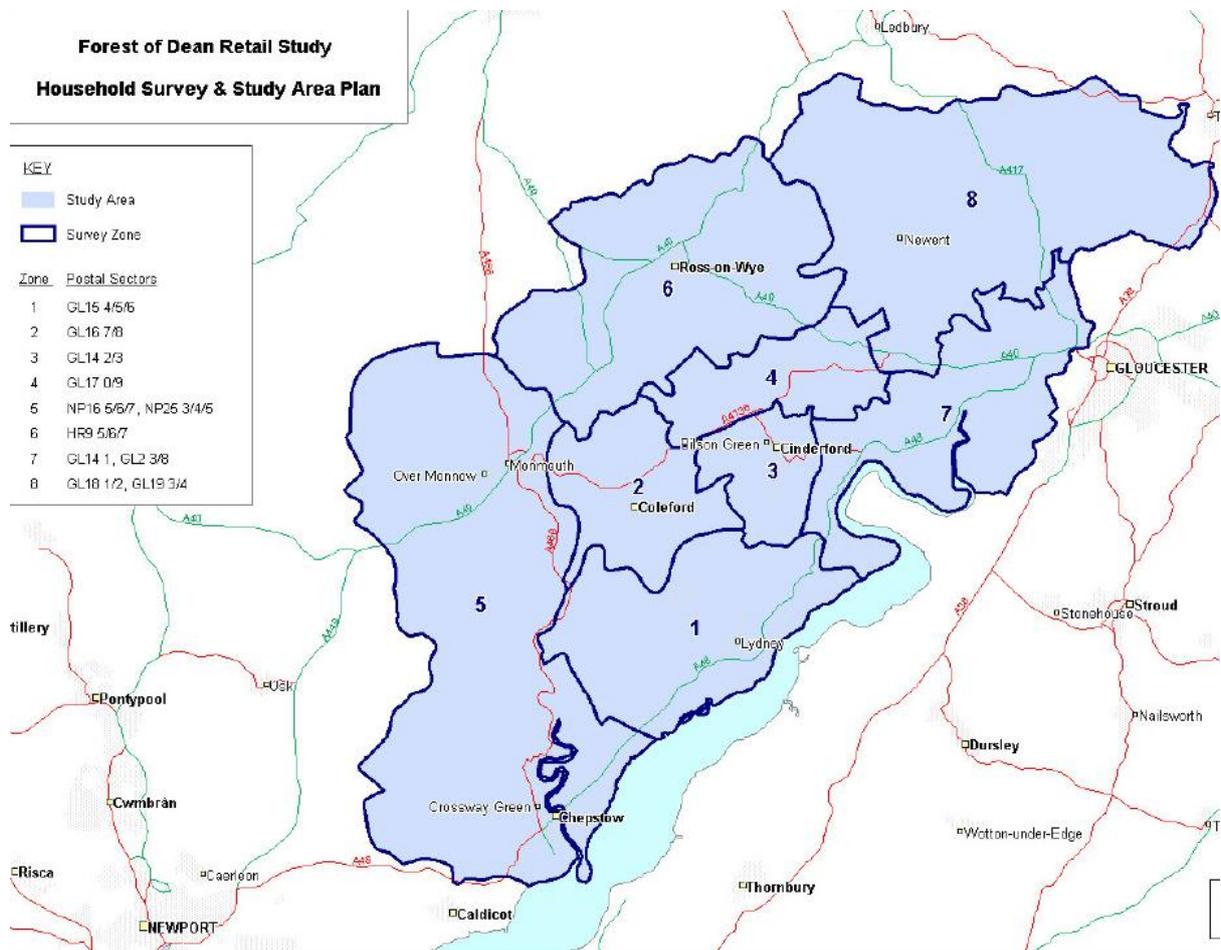


Figure 12: Key retail catchments for Forest of Dean district  
Source: Forest of Dean Retail Study Update published (2011) GVA

## Employment by location

An indicator for the sustainability of a settlement is employment density (i.e. number of jobs compared to total population). Not all people will choose to live and work within the same settlement, but settlements with a higher employment density will offer the best opportunity to be able to do so, while minimising pressure on transport. Settlements with low employment density will inevitably limit residents' options, requiring them to commute further to work.

The following table provides an indication of the larger employment generators across the district, arranged according to location. These figures have been provided directly by the companies themselves, where available.

Centre	Employment generator	Employment Type	Employee Numbers
<b>Coleford</b>	Forest of Dean District Council (via Publica)	Local government	150
	Forestry Commission	Government agency	25
	Dean Estate Agents	Estate agents	6
	Forterra Formpave	Concrete product supplier	
	Five Acres Garage	Car dealership	42
	Lucozade Ribena Suntory	Soft drink manufacturer	
	Kevin Toombs Estate Agents (KJT)	Estate agents	4
	Polymer Products (UK) Ltd.		11
	SPP Pumps	Hydraulic equipment supplier	476
<b>Cinderford</b>	BASF Metals Recycling	Recycling centre	35
	Coleford Brick & Tile Company	Brick and tiles	20
	Dezac Group	Producer and distributor	
	House of Flavours	Food processors	15
	JM Grail engineering	Engineering	45
	KW Bell Group Ltd	Construction	300
	LEONI Temco Ltd	Copper	73
	Cinderford MOT and service centre	Car maintenance	
	Rothdean	Truck and trailer services and accessories	41
<b>Cinderford</b>	Forest Products	Timber suppliers	21
<b>Drybrook</b>	Hale & Co (Drybrook) Limited	Timber and builders merchants	47
<b>Lydney</b>	Albany Engineering	Manufacturing	57
	Apex Architecture	Architectural services	7
	Berwin Industrial Polymers Ltd	Manufacture of other rubber products	85
	Glatfelter UK	Speciality papers and engineered products	287
	JD Norman Lydney	Engineering/formed, machined and cast metals	197
	Maybey Bridge	Steel fabricated bridging	160
	Petlon Polymers Limited	Manufacture of other plastic products	50
	Watts of Lydney	Commercial vehicle dealer manufacturing and property	50
<b>Mitcheldean</b>	Bee Green NRG	Renewable energy	
	Bespoke Brewing Company	Traditional brewery and bespoke label design	
	Bladeroom	Modular data centres	14 (plus 50 contractors)
	Ceva Logistics	Logistics contract services for Xerox Internet information services	
	Exploration Logistics Group PLC	Supplier and distributor fasteners and fixing	

	Forest of Dean Fasteners	Supplier and distributor fasteners and fixing	6
	Frontier Medex	Health and safety consultants	131
	GE Aviation/Dowty	Aviation	
	Overbrook Recovery	Car recovery centre	
	Simplicity Business	Finance/payroll services	
	Stock Sweepers	Road sweepers	56
	Teledyne Deophysical Ltd.	Geophysical instruments	
	The Warranty Group (Assurant)	Insurance/administration & undertaking	183
	Whitcroft Essentials Limited	Stationary & haberdashery	
	Wye Technology UK Ltd	Electronics manufacturer	
	Xerox/ Xerox IM Europe Services	Scanning document services	
	Freemans of Newent	Poultry farming	
	3 Shires Garden Centre	Garden centre	50
	Surcotech International Ltd	Decorative metal finishes	
	Steve Gooch Estate Agents	Estate agents	
<b>Newent</b>	Two Rivers Housing	Housing association	160
<b>Newnham</b>	Glevum	Windows, doors and conservatories	
<b>Ruardean</b>	MF Freeman	Housing developments, retirement, leisure, contracting etc.	120
	Severn & Wye Smokery	Fish and seafood smokery and restaurant	136
<b>Westbury-on-Severn</b>	Severn Valley Woodworks	Timber merchants	

Table 9: Large employers of Forest of Dean District. Source: Direct correspondence with each company, July 2018.

This illustrates that there are good level and range of larger employers in Coleford, Cinderford and Lydney, but less so in Newent. The biggest anomaly here is Mitcheldean, which hosts a great number and variety of employment generators proportionate to its small population size. This is due to the large business park at Vintage point, which was formerly the base of multi-national company Rank Xerox, and currently accommodates up to 100 separate businesses on the site.

## Business activity by location

The following table compares 50 centres in the Forest of Dean district by population against centres weighted by business activity. These *business-activity-by-location* weightings have been determined by a counting the number of business rated premises there are within each location. This is an accurate way of determining how many registered there are in each centre which is current at the time of report preparation, however they cannot capture the scale of each business, so large and small businesses are all assigned the same weighting.

Population	CENTRE	CENTRE	Business Rated properties
12121	Coleford	Cinderford	388
11919	Cinderford	Lydney	355
9497	Lydney	Coleford	327
5722	Newent	Newent	174
3737	Tutshill/ Sedbury	Mitcheldean	137
3105	Bream	Staunton/Corse	75
2686	Mitcheldean	Bream	54
1967	Lydbrook	Lydbrook	46
1645	Drybrook	Whitecroft/ Pillowell/ Yorkley	45
1281	Whitecroft/ Pillowell/ Yorkley	Sling	42
1251	Newnham	Tutshill/ Sedbury	39
1212	Blakeney	Drybrook	35
1182	Ruardean	Newnham	32
1178	Woolaston	Aylburton	29
1143	Huntley	Parkend	29
1134	Staunton/Corse	Longhope	24
1074	Longhope	Woolaston	22
920	Sling	Huntley	16
858	Beachley	Littledean	15
800	Littledean	Ruardean	14
734	St Briavels	Blakeney	14
688	Dymock	Brockweir	12
637	Tibberton	St Briavels	11
568	Ruardean Hill	Hartpury	9
543	Parkend	Highleadon	8
531	Hartpury	Soudley	8
511	Soudley	Woodcroft	8
490	Ruardean Woodside	Alvington	7
485	Bromsberrow Heath	Redbrook	7
483	Aylburton	Ellwood	6
423	Alvington	Northwood Green	6
379	Redbrook	Ruardean Woodside	6
338	Clearwell	Staunton (near Coleford)	6

336	Brockweir	Dymock	5
319	Woodcroft	Newland	5
297	Staunton (near Coleford)	Westbury on Severn	5
267	Oldcroft	English Bicknor	4
267	Viney Hill	Oldcroft	4
248	Westbury upon Severn	Beachley	3
239	Redmarley D’Abitot	Broadoak	3
235	English Bicknor	Tibberton	3
214	Northwood Green	Upleadon	2
209	Ellwood	Redmarley D’Abitot	2
193	Cliffords Mesne	Brierley	2
168	Upleadon	Cliffords Mesne	1
159	Newland	Kempley Green	1
154	Brierley	Bromsberrow Heath	1
150	Edge End	Edge End	0
138	Kempley Green	Ruardean Hill	0
117	Broadoak	Viney Hill	0

Table 10: Centres ranked by population size compared with quantity of business rated premises

Legend				
Tier 1 Market towns	Tier 2 Large villages	Tier 3 Medium villages	Tier 4 Small villages	Tier 5 Hamlets/ open countryside

While Cinderford and Lydney are the largest concentrations of business rated premises, Coleford lags behind, despite being the largest conurbation in the district in terms of population size. Predicably, Mitcheldean ranks a couple of places higher in the hierarchy comparative to its population size, which is undoubtedly due to the very large employment facility which is Vantage Point business park.

## Housing need

Across Forest of Dean district, there are currently over 2,000 people whose names are on the waiting list for affordable housing. In the following graph, these requests are grouped by Parish.

578	West Dean	51	Huntley
491	Coleford	48	Dymock
452	Lydney	39	Woolaston
404	Cinderford	35	St. Briavels
234	Newent	34	Hartpury
214	Tidenham	34	Mile End
174	Mitcheldean	30	Staunton/Corse
120	Drybrook	29	Rudford & Highleadon
101	Littledean	28	Redmarley
100	Broadwell	28	Tibberton
100	Ruspidge	24	Staunton (Coleford)
88	Coalway	20	Churcham
83	Ruardean	20	English Bicknor
67	Lydbrook	17	Soudley
66	Aylburton	16	Upleadon
61	Alvington	15	Kempley
59	Longhope	11	Bromsberrow
58	Awre	10	Oxenhall
54	Newland	7	Hewelsfield & Brockweir
54	Westbury-on-Severn	6	Taynton
53	Newnham		

Table 11: Housing need by Parish location. Source: Forest of Dean District Council housing register. (2018)

Legend				
Tier 1 Market towns	Tier 2 Large villages	Tier 3 Medium villages	Tier 4 Small villages	Tier 5 Hamlets/ open countryside

These include first, second and third requests by location, but still provide an overall pattern of where people are waiting to access affordable housing. The results are commensurate with the size of the settlements, with high levels of affordable housing demand in Lydney, Coleford and Cinderford.

While the numbers per parish for affordable housing tail off in the rural areas, however collectively, the requests for affordable housing in the rural areas across the district equal to a significant number. The following figure shows the split of housing need based on settlement type, aligned with the pyramid graph in Figure 5.

West Dean Parish ranks highest in this table in terms of demand for affordable housing, but this is due to the anomalous nature of the Parish itself, which includes the Whitecroft/ Pillowell/ Yorkley conurbation as well as Parkend, Bream, Sling and the eastern outliers of the Coleford conurbation, including Mile End, Broadwell, Coalway and Palmers Flat.

## Affordable housing demand across settlement types

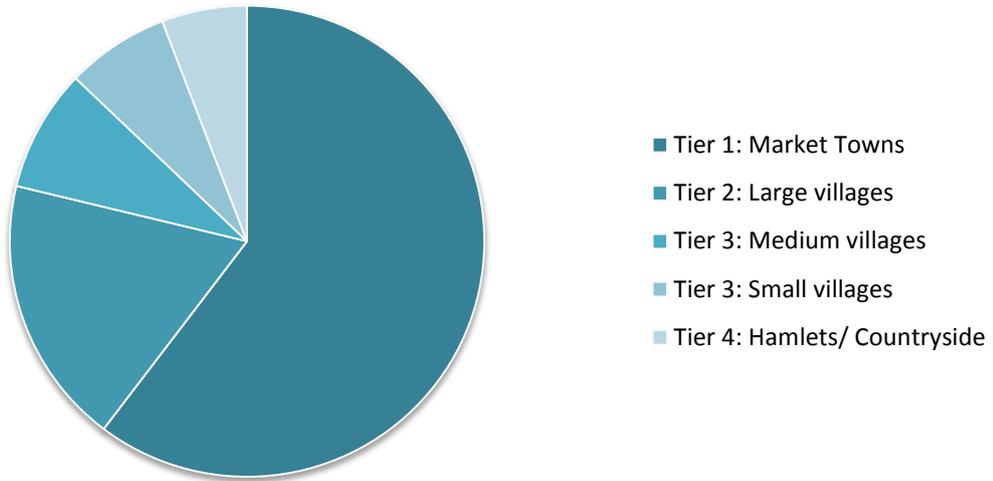


Figure 13: Housing need by settlement type Source: Forest of Dean District Council housing register. (2018)

As Figure 8 refers to the first, second and third preference by location of each entry on the housing register, which equals to 4,707 entries, but this can be divided by three to arrive at the numbers of families or individuals who are actually on the current waiting list.

This data reveals that demand for affordable housing is mainly focused on the market towns; however there is strong demand across the villages and smaller settlements too.

## Travel patterns and accessibility

### Car travel

Minimising car use is critical to achieving sustainable development. Communities which can provide a range of services, including economic, employment and social needs, are favoured in order to reduce reliance on travel by private car, and maximise efficiency of service infrastructure provision.

Current data on commuting patterns thus provides a measure of the self-containment of a community, informing potential sustainable growth directions, and helping to avoid the development of commuter towns. This data indicates that the Forest of Dean District has low levels of self-containment, especially when compared with other regional centres of south west England. This is consistent with a trend of smaller settlements tending to be less self-contained in terms of providing a balance of jobs to resident workforce. The Forest of Dean District settlements are at risk of towards functioning as dormitory towns for out-commuters, who account for over half of the district's economically active residents- a trend which is already established to a certain degree but has the potential to become greatly exacerbated.

The following table provides an overview of car ownership by location. While there may be many factors behind this statistic, it does provide an insight into which gives an indication of which centres require higher levels of car dependency, and which centres support a greater carless population. Predictably, households with a higher level of car ownership are smaller centres, which are more remote from services and employment areas.

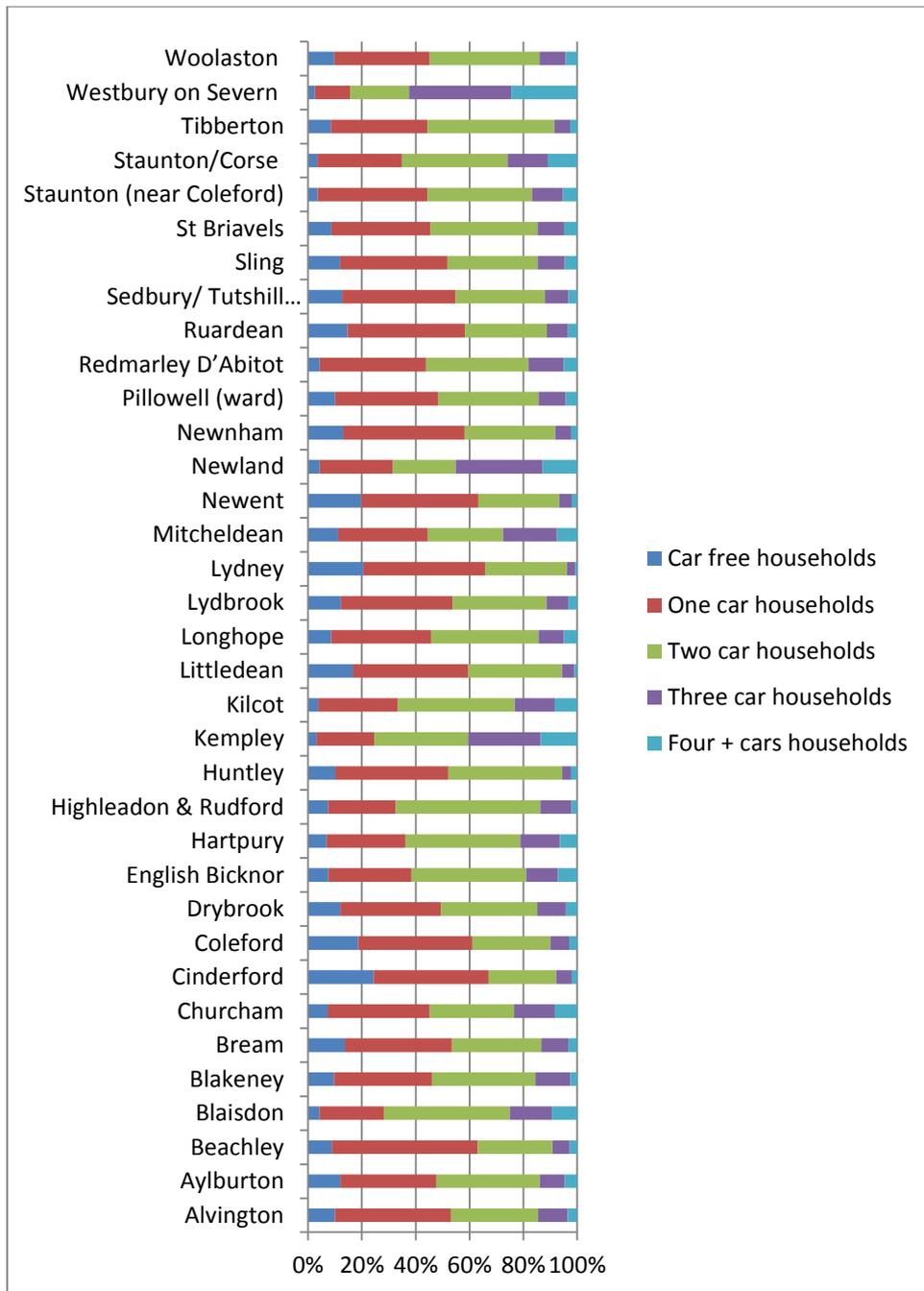


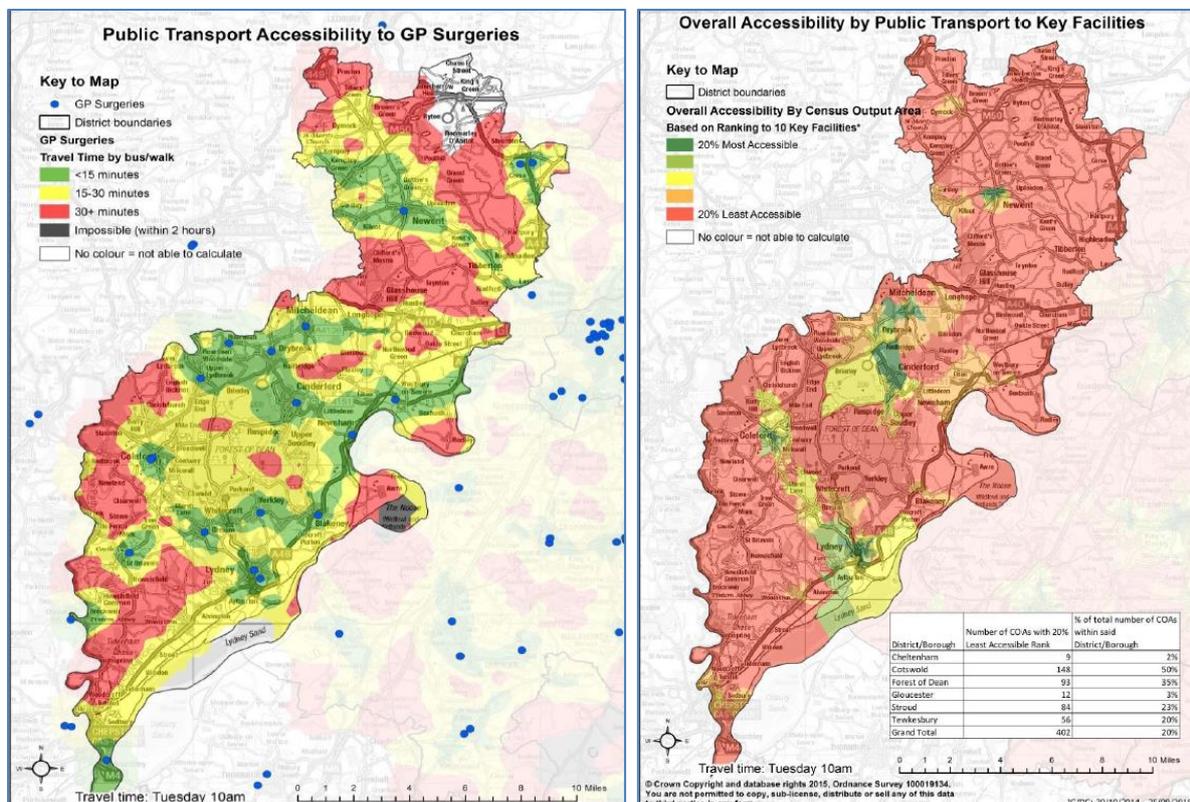
Figure 14: Housing need by settlement type Source: Forest of Dean District Council housing register. (2018)

## Public transport

The Gloucestershire Accessibility Matrix 2016 is developed by the Inform Gloucestershire team (based in Gloucestershire County Council) has weighted all wards, LSOA and postcodes within the county in terms of their accessibility to key services by both car and bus/ walking. The have developed the following ranked thresholds for each locality:

Thresholds (Time in minutes):	Drive	Bus/walk
Good access	<5	<15
Fair access	5-15	15-45
Poor access	15+	45+
Impossible	N/A	Impossible

Based on this methodology, the LSOA's within the Forest of Dean District were given the following overall ratings for public transport provision:



Figures 15 & 16: Public transport accessibility to GP's and key facilities. Source: Gloucestershire County Council (2016)

In the table below, the rank represents the average time of all journeys to key services, with the most accessible LSOA in Gloucestershire ranked as 1, and the least accessible as 373.

LSOA	Public Transport Rank
CINDERFORD EAST 2	32
CINDERFORD WEST 3	41
LYDNEY EAST 3	44
COLEFORD EAST 2	96
ALVINGTON, AYLBURTON AND WEST LYDNEY 1	104
CINDERFORD WEST 1	114

CINDERFORD EAST 1	118
TIDENHAM 1	133
CINDERFORD WEST 2	139
BERRY HILL	151
COLEFORD EAST 1	158
COLEFORD CENTRAL 1	198
MITCHELDEAN AND DRYBROOK 1	200
LYDNEY EAST 2	213
COLEFORD EAST 3	216
COLEFORD CENTRAL 2	219
COLEFORD EAST 4	223
TIDENHAM 4	224
MITCHELDEAN AND DRYBROOK 3	225
NEWENT CENTRAL 1	226
BREAM 2	230
NEWENT CENTRAL 2	236
LYDNEY EAST 1	251
BREAM 1	270
LYDNEY NORTH	278
TIDENHAM 3	280
LITTLEDEAN AND RUSPIDGE 2	284
PILLOWELL 1	285
TIDENHAM 2	292
LYDBROOK AND RUARDEAN 2	293
LYDBROOK AND RUARDEAN 1	294
NEWLAND AND St BRIAVELS 2	297
PILLOWELL 2	301
CHRISTCHURCH AND ENGLISH BICKNOR	304
LYDBROOK AND RUARDEAN 3	305
NEWNHAM AND WESTBURY 1	309
LITTLEDEAN AND RUSPIDGE 1	316
MITCHELDEAN AND DRYBROOK 2	317
CHURCHAM AND HUNTLEY	319
ALVINGTON, AYLBURTON AND WEST LYDNEY 2	321
OXENHALL AND NEWENT	323
BLAISDON AND LONGHOPE	330
AWRE	333
HEWELSFIELD AND WOOLASTON	335
HARTPURY	340
NEWLAND AND St BRIAVELS 1	349
REDMARLEY	350
NEWNHAM AND WESTBURY 2	353
TIBBERTON	355
BROMESBERRON AND DYMOCK	357

Table 14: Accessibility ranking of each centre by public transport. Source: Gloucestershire Accessibility Matrix 2016

Legend				
Tier 1 Market towns	Tier 2 Large villages	Tier 3 Medium villages	Tier 4 Small villages	Tier 5 Hamlets/ open countryside

The table above is colour coded to assign each Lower Super Output Area (LSOA) to the scale of settlement it represents (as per Figure 1; page 8). This has been done as closely as is possible, as many LSOAs represent a combination of open countryside, smaller villages and urban areas. However, a clear picture of public transport accessibility emerges from this exercise, which demonstrates how poorly smaller centres and less densely populated parts of the district perform when it comes to public transport provision.

## Significance

Analysis of the complex economic, social and cultural relationships between settlements suggests that a means of making qualitative assessments of the roles of towns and settlements is required. Relying solely on traditional quantitative assessment of population size, employment and transport accessibility only gives a partial, quantitative assessment of the degree of significance of the different centres, and may miss important qualitative elements.

“Significance” in this context has a more nuanced meaning than size alone. Of course, larger centres are significant in that larger populations inevitably provide more employment and services, and have larger economies. Settlement may be classified as significant on one or more of the following dimensions. The following key questions developed by Roger Tyms (2005) providing a framework to assess the significance of different centres within the Forest of Dean District:

<b>Question</b>	<b>FoD commentary</b>
<i>Has the most population of its settlement type in its locality?</i>	<p>Of the four market towns, this relates to Cinderford and Lydney, which are vying for biggest population centre. Traditionally this has always been Cinderford, and therefore the centre has received a lot of attention for town improvements and regeneration. However, due to the combined impacts of Cinderford’s declining economy and Lydney’s market advantage from the end of the Severn bridge toll, this could mean Lydney will eclipse Cinderford as the biggest population centre in the Forest of Dean district, and this trend could reasonably be expected to continue. The retail and services assessment demonstrates that Lydney’s economy and retail sector is much more buoyant than Cinderford, and given significant growth in the east of Lydney and ongoing speculation, it is anticipated that this trend will continue.</p> <p>Coleford ranks third in terms of population centre, however as a conurbation of smaller settlements which circle Coleford town proper, it is the largest population hub in the district. This does belie the cultural identity of these communities however, many of whom see themselves as distinct from each other.</p>
<i>Main employment centre of its settlement type</i>	<p>The assessment of employment generating companies by location reveals that Cinderford, Coleford and Lydney all provide a hub of significant employment generating uses and sites. Newent has far less large employment generators, proportionate to its size. Mitcheldean stands out as attracting a large and diverse combination of employment generating uses, despite its relatively small population size. This is due to the large employment facility which is the Vantage Point Business Park (former Rank Xerox site) which has the capacity to accommodate up to 5,000 employees- which exceeds the village’s total resident population. It currently accommodates over 100 businesses, which range from sole traders to at least 16 significant employment generating companies.</p>
<i>Main retail centre of its settlement type (in terms of floor space and mix)</i>	<p>The assessment of services and retail offer reveals that Lydney has a much stronger retail sector than its counterparts Cinderford &amp; Coleford, with the former score rating at 221 compared to the latter’s 182, despite the two centres having very similar population sizes. Lydney has the largest retail offer and most varied town centre of the district, however the town centres of Coleford, Newent and Cinderford still offer an important cluster of retail opportunities.</p>

	Charity shops are interpreted in some circles as an indicator of town centre decline- though correspondingly they fill an important gap in the retail offer of most town centres. The proliferation of charity shops however, can be an indicator of the prosperity of that centre. In Forest of Dean District's case, there are 3 charity shops in Newent, 5 in Lydney, 5 in Coleford and 4 in Cinderford (FoD town centre assessments: 2017). This is commensurate with the scale of their retail offers.
<i>Provides or takes special or unique roles that others cannot or will not (eg. Seat of University and higher education's institutes)</i>	While the economy of Cinderford has historically been based on manufacturing and industry which is now in decline, the centre is subject to major regeneration project which includes capacity for 175 new dwellings and 6ha of employment land, as well as funding commitments to a new, purpose built college facility. Its future role as a district scale education provided aims to give Cinderford renewed significance into the future.
<i>Provides strategic or command and control functions that determine overall levels of service or activities across a wide area</i>	Coleford has status as an administrative centre, with both the head office of the Forest of Dean District Council and the Forestry Commission based here.
<i>Higher profile directly as a result of its history or heritage status (eg. World heritage site)</i>	The Forest of Dean includes significant parts of the iconic Malvern Hills and Wye Valley Areas of Outstanding beauty, as well as the statutory Forest of Dean itself. These areas are the key tourist draw cards to the region, and present further, unrealised opportunities for increased tourism.
<i>Major infrastructure intersections or has access to a wider network</i>	The town centres which are particularly well connected to major infrastructure networks and benefit from ease of access to larger centres outside district include Newent due to its proximity to M50 corridor and thus Birmingham to the north and Bristol and London to the south.  Furthermore, Tutshill, Sedbury and Beachley- which form a functional ring around Chepstow benefit from their proximity to Severn bridge which provides a fast and direct route into Bristol. Lydney also benefits from proximity to this network.
<i>Major built stadia or other facilities</i>	Hartpury college is a relatively isolated but extensive educational facility in the north-east of the district, close to the boundary with Malvern Hills district.
<i>Visitor attractions of national reputation (based on visitor numbers)</i>	Wye valley & Forest of Dean are both significant tourism attractions, which attract an estimate of 2.5 million visitors per year. This generates approximately £134,821,000 into the Forest of Dean district economy as well as 3,139 jobs (accounting for 8% of the proportion of all employment in the district). Some centres are better positioned to benefit from these visitation numbers, including Coleford and Parkend (Source: Wye Valley and Forest of Dean Destination Management Plan 2015-2020).

Table 14: Commentary against "significance" criteria

Other local dimensions may identify settlements that disturb more conventional population based hierarchies.

The relationship between 'significance' and growth is likewise not straightforward. Some centres of significance are based on cultural, heritage, and/ or environmental criteria, in which case population growth and resulting service needs would be more detrimental; on the other hand, increased transport services may be required. Other significant centres may need to be identified for growth in

order to maintain their significance in the region, and ability to provide employment and services. Within the planning framework, this significance is expressed to some extent through special designations such as conservation areas and AONBs.

## Environmental constraints

The geography and natural values of the Forest of Dean district create a series of environmental constraints and limits of the settlement pattern and growth capacity of the district.

These primarily are:

### *The Wye River and the Severn estuary*

The district is defined by the two river corridors of the Severn to the east and the Wye to the west, which meet at the Beachley peninsula at the district's most southern point. This creates the thin, V-shaped, wedge at the south of the district. The river corridors both contain important environments along their extent, particularly the estuarine environments of the Severn River which comprises of a network of low lying flood plains which provide important habitat for migratory birds. The Severn River corridor is also associated with large swathes of flood prone land which is unsuitable for anything more than minimal development.

This constrains growth in centres like Lydney, Westbury Upon Severn and Newnham which are located along the Severn River, and limits growth in an easterly direction.

### *The Royal Forest of Dean*

The statutory Forest of Dean is a protected area managed on behalf of the Crown by the Forestry Commission. This is a large area of mixed woodlands which covers an area of 8,286ha. This protected area has a long history, and its status as a reserve for timber and game as well as the location of coal outcrops has defined the settlement pattern around it, forming the Forest ring of settlement which circles the statutory Forest, and provides a distinctive and attractive forest back drop to these settlements.

### *Wye Valley and Malvern Hills Areas of Outstanding Natural Beauty (AONB)*

Extensive parts of the district are included in the Wye Valley AONB which includes small settlements of Staunton (Coleford), Redbrook & Brockweir. This river valley contains spectacular scenery which contributes significantly to the district's appeal as a tourist destination.

The Malvern Hills AONB only covers the very northern tip of the district, including Brompton parish.

### *Sites of Special Scientific Interest (SSSI)*

Estuarine, woodland and geological features have been identified as special places and thus attracted a SSSI designation to acknowledge these unique qualities.

### *Conservation areas*

Several towns have conservation areas defined within their historic centres, which is a limiting factor on certain modes of development. These include Newent, Coleford, St Briavels, Hewelsfield, Blakeney, Clearwell, Alvington, Aylburton, Lydney, Pillowell, Newland, Staunton (Coleford), English Bicknor, Lydbrook, Ruardean, Mitcheldean, Longhope, Staunton/ Corse & Redmarley D'Abitot.



Figure 10: Forest of Dean district constraints map

## Centre by Centre assessment

### Market towns

The four market towns of Cinderford, Coleford, Lydney and Newent have traditionally been the focus of development activities and planning in the Forest of Dean District. In this next section, they will be discussed individually.

#### Cinderford

Snap shot	
Total population	11,919
Median age	40.8
Number of households	5,182
Housing tenure	68.1% owner occupied 16.9% Social rented 13.4% Private rented 1.2% Living rent free
Transport links	Located on the A4151
% Economically active residents	69.5%
Office of National Statistics	Out of town manufacturing A city or town surrounded by inhabited countryside Least divergent/ Older blue collar

*\*Demographics based on NOMIS 2011 statistics for Cinderford built up area.*

Employment	Services
<p>The number of larger employers for Cinderford is proportionate with the size of the centre itself. A notable employment generator is KW Bell, the housing construction company which is based here.</p> <p>Cinderford has the highest number of business rated premises in the district, indicating an active economy, and a healthy small to medium sized business sector.</p> <p>High employment sectors are the repair of motor vehicles and motor cycles, manufacturing and human health and social work.</p>	<p>It hosts the second largest town centre of the district, although footfall in the Cinderford town centre has dropped by more than two thirds since 1999 and recorded crime in the town centre is much higher than other centres. (Cinderford town centre assessment: 2017). Cinderford is the largest population in the district but rates only third in terms of retail and community services ratings (see Table 5).</p> <p>While Cinderford is the second largest hub for population, it rates third for services within the Forest of Dean. This means it is falling behind for retail and community services proportionate to its size.</p>
Housing	Travel
<p>Cinderford ranks third highest for housing need in the district, however this is only by a small margin behind Coleford and Lydney. The housing need is concerning in Cinderford, as many housing developments appear to be stagnant, most likely due to viability, and most development in the past decade has focussed on Ruspidge in the south of the</p>	<p>Cinderford performs well in terms of transport, and is rated as the best area for public transport provision in the district. Furthermore, it has a high proportionate of households with no car or one car. This indicates that Cinderford is one of the best places in the district for supporting sustainable travel. However it is constrained in terms of road network, due to its distance</p>

centre.	from any key arterial routes.
<b>Summary</b>	
<p>Cinderford is the traditional heart of the Forest of Dean district, with a strong industrial history. As a community, Cinderford is the only location in the district which features in the top quintile for deprivation index in the UK. The town is socially and economically depressed, with low rates of development while conversely there is growing need for affordable housing. Aims to regenerate the town through a new purpose built, multi-function precinct in the northern quarter seek to reverse the slow decline of this centre.</p> <p>Cinderford is directly accessible from the neighbouring village of Littledean, and has become continuous with adjoining community of Ruspidge, which has joined with the larger centre and now forms its southern tail. It is these outlying settlements which have enjoyed greater development activity in the past decade, whilst the traditional centre of Cinderford has remained relatively dormant.</p>	

## Coleford

<b>Snap shot</b>	
Total population	12,121
Median age	43.2
Number of households	5,270
Housing tenure	66.8 % owner occupied 15% Social rented 16.2% Private rented 2% Living rent free
Transport links	Linkages to A4136 and A66, well located to access A40 at Monmouth
% Economically active residents	67.6%
Office of National Statistics profile	Coastal and Countryside: Out of Town Manufacturing A city or larger town surrounded by inhabited countryside Typical traits: Least divergent.

*\*Demographics based on NOMIS 2011 statistics for Coleford built up area.*

<b>Employment</b>	<b>Services</b>
There is a large number of employment generators in Coleford, including Lucozade Ribena Suntory, SPP Pumps and the Forest of Dean district council itself. Coleford has the third largest amount of business rated premises, which means it is falling behind in this area by a small margin, compared with Cinderford.	Coleford's town centre has a satisfactory range of key services; however it lacks the variety and larger retailers to prevent significant leakage of retail trade from local residents. While Coleford rates second for services in the district, considering the size of its population when outlying areas are included, the town centre is underperforming.
<b>Housing</b>	<b>Travel</b>
Coleford is the second highest for housing need in the district, followed by West Dean which also partly accounts for the Coleford hub (including Berry Hill & Five Acres).	Coleford is well connected to the neighbouring small city of Monmouth, and forms a key node in the functional network of settlements around the statutory forest. It is also strongly connected with Cinderford and Lydney and is also well

	located to benefit from tourist numbers to recreational activities in the Forest of Dean. Coleford supports a higher number of no car and one car households than other parts of the region, but rates below Cinderford and Lydney in terms of quality of public transport provision.
<b>Summary</b>	
Coleford is a compact and pleasant settlement, which supports a larger number of satellite communities, including Berry Hill, Broadwell, Coalway, Milkwall and Five Acres. The core settlement is relatively small, but when aggregated with these outlying settlements, it is a very significant centre within the context of the Forest of Dean district. Coleford is also an important administrative centre for the Forest of Dean, which includes the Forest of Dean District Council offices as well as the Forestry Commission headquarters for management of the Statutory forest of dean.	

## Lydney

<b>Snap shot</b>	
Total population	9,497
Median age	41.7
Number of dwellings	4,129
Housing tenure	70.6% owner occupied 12.4% Social rented 11.2% Private rented 1.6% Living rent free
Transport links	A48- direct links to Gloucester to the north. and Chepstow to the south, with linkages to Bristol via M48 at Severn bridge
% Economically active residents	70.7%
Office of National Statistics profile	Out of Town Manufacturing A small town surrounded by inhabited countryside Younger blue collar/ Older workers

*\*Demographics based on NOMIS 2011 statistics for Lydney built up area.*

<b>Employment</b>	<b>Services</b>
Major employment sectors include manufacturing, repair of motor vehicles, human health and social work followed by construction. Lydney has a few large employment generators, such as Glatfeller UK and JD Norman, Lydney. It contains the second largest number of business rated premises in the district, after Cinderford.	While Lydney is the second largest centre in the district, it has the largest congregation of shops and services. In terms of services ratings, it is the highest rated by a significant margin (Table 5). One of Lydney's strengths is it larger and more buoyant town centre, and range of retail offer.
<b>Housing</b>	<b>Travel</b>
Lydney has the third largest housing need in the district, after Coleford and West Dean.	Lydney has higher rates of no car and one car households than other parts of the district, and rates as the second best in terms of public transport provision, after Cinderford.
<b>Summary</b>	
Lydney has been subject to some significant development activity in recent years, with a large area	

of land being developed in the east of Lydney. Lydney is positioned close enough to the Severn bridge to benefit from the tolls being lifted, as well as the proximity to Bristol, which has excited the property market here and poised Lydney for sustained future growth. If it continues to enjoy steady growth, it could eclipse Cinderford and Coleford to become the largest population centre in the Forest of Dean district.

## Newent

Snap shot	
Total population	5,722
Median age	44
Number of dwellings	2,488
Housing tenure	66.6% owner occupied 14.9% Social rented 16.3% Private rented 1.6% Living rent free
Transport links	Linkages via A and B roads to M50, and A417 to Gloucester.
% Economically active residents	71.5%
Office of National Statistics profile	Countryside A small town surrounded by inhabited countryside Aspiring households.

*\*Demographics based on NOMIS 2011 statistics for Newent built up area.*

Employment	Services
Newent contains less large employment generators than the other market towns, with the exception of Two rivers housing association. The number of business rated premises is fourth largest in the district, which is proportionate to its place on the hierarchy in terms of population size.	Newent ranks fourth highest in the district in terms of service provision, which is proportionate to its place on the hierarchy in terms of population size.
Housing	Travel
Newent ranks fifth for housing need in the district, which is proportionate to its place in the hierarchy as a Parish. It is advantaged by a more healthy and viable housing prices and more development activity than places like Cinderford.	Newent rates badly for public transport provision for its size, and is below centres smaller than it like Mitcheldean and Tutshill/Sedbury. However It benefits from its proximity and access to both the A40 and the M50, which put it within the commuter belt for Gloucester, and even Birmingham.
Summary	
Newent operates in relative isolation for the other three market towns which form a tight network. However Newent is an important centre servicing the Northern catchment of the district. This position has helped to sustain steady growth in the town. Growth is limited however, by tight and well defined town centre with limited land around it.	

## Large villages

### Bream

Snap shot	
Total population	3,105
Median age	41.5
Number of dwellings	1,350
Housing tenure	71.7% owner occupied 15.7% Social rented 9.5% Private rented 1.5% Living rent free
Transport links	Located on the B4234 with good linkages to Lydney.
% Economically active residents	69.8%
Office of National Statistics profile	Small town surrounded by inhabited countryside Prospering semis/ Older blue collar/ accessible countryside

*\*Demographics based on NOMIS 2011 statistics for Bream built up area.*

Employment	Services
Bream does not host any large employment generators and ranks lower in terms of business rated premises in relation to its population size. This indicates that Bream is largely a residential area, and relies on neighbouring centres for employment and services.	It ranks as 11 for services, but is the sixth largest population centre in the district, indicating that there is some leakage of services to the two neighbouring market towns.
Housing	Travel
Bream is included in the West Dean parish, which has the highest housing need in the district. This is a distortion of the situation of the ground, due to the anomalous nature of the Parish itself, which contains a large number of small centres, thus skewing the figures. It is difficult to ascertain how much of this housing need would be in Bream itself, though it is assumed that being the largest centre in West Dean, this would be significant.	Bream rates proportionately for its size and place on the settlement hierarchy for the standard of public transport provision.
Summary	
Bream is a larger settlement of over 3000, which is well connected to both Coleford & Lydney, and forms part of the Forest ring of settlements of which it is the largest single centre. Bream is well connected to Lydney, and it is assumed that it is highly reliant on Lydney for employment and services.	

### Drybrook

Snap shot	
Total population	1,645
Median age	44
Number of households	715
Dwelling types	100% Unshared dwelling

Housing tenure	77% owner occupied 12.9% Social rented 7.8% Private rented 1.2% Living rent free
Transport links	Located close to the A4136 corridor
% Economically active residents	67.0%
Office of National Statistics profile	Out of town manufacturing Village surrounded by inhabited countryside Village life/ Younger blue collar/ Accessible countryside

*\*Demographics based on NOMIS 2011 statistics for Drybrook built up area.*

<b>Employment</b>	<b>Services</b>
Drybrook has one larger employment generator, which is Hale & Co Ltd, hardware supplier and timber merchant. It has 35 other business rated premises, which makes it lower on the hierarchy for business activity than it is for population.	For services, Drybrook ranks equally to its population size in terms of place on the hierarchy.
<b>Housing</b>	<b>Travel</b>
Drybrook is between Mitcheldean and Littledean in terms of housing need, which is roughly commensurate with its population size.	Drybrook rates well for public transport provision considering its size, and also has higher rates of no car and one car households than other parts of the region. This may be because its geographical location and proximity to arterial roads make it well connected to bus networks.
<b>Summary</b>	
Drybrook is a larger centre with a range of basic services, capable of accommodating more growth. It too forms a part of the forest ring and is well connected to centres like Ruardean and Mitcheldean.	

## Lydbrook

<b>Snap shot</b>	
Total population	1,967
Median age	42.4
Number of dwellings	855
Housing tenure	77.7% owner occupied 14.4% Social rented 7.1% Private rented 0.9% Living rent free
Transport links	Located close to the A4136 corridor
% Economically active residents	67.3%
Office of National Statistics profile	Suburbs Village surrounded by inhabited countryside/ Hamlet or isolated settlement in inhabited countryside Village life/ Older blue collar

*\*Demographics based on NOMIS 2011 statistics for Lydbrook built up area.*

Employment	Services
Lydbrook does not contain any large employment generators, though it does have some large industrial units with active businesses operating within them. Lydrbook has an equal ranking in terms of population size and number of business rated premises.	Lydbrook rates highly in terms of its services rating, proportionate to its population size. It contains a healthy number of customer services and community facilities.
Housing	Travel
Lydbrook rates as 14 <sup>th</sup> in terms of housing need within the district.	Lydbrook rates lower for public transport provision than other centres of equivalent population size.
Summary	
Lybrook is a long, narrow settlement located along the valley floor of the Lyd river, before it joins the Wye. It is traditionally and industrial area and still contains a couple of industrial uses. Basic services located here, which support a network of smaller settlements. Future growth will be constrained by Lydbrook's geography.	

### Mitcheldean

Snap shot	
Total population	2,686
Median age	42.4
Households	1,168
Housing tenure	75% owner occupied 12.3% Social rented 8.8% Private rented 1.4% Living rent free
Transport links	Located on the A4136, with good linkages to the A40
% Economically active residents	71.1%
Office of National Statistics profile	Out of Town Manufacturing A hamlet or isolated settlement in inhabited countryside Accessible countryside/ Village life/ Terraced blue collar/ Prospering older families

*\*Demographics based on NOMIS 2011 statistics for Mitcheldean built up area.*

Employment	Services
Mitcheldean has a robust employment sector, due to the Vantage point business park. Larger single employment generators include the Warranty group and Frontier Medex which are located within Vantage point. Unsurprisingly, Mitcheldean rates directly after Newent for business rated premises, which is two ranks higher than its place on the hierarchy in terms of population size.	Mitcheldean rates lower for services ratings proportionate to its population size. This is surprising given the quantity of non-resident workers it probably supports.
Housing	Travel
Mitcheldean ranks after Tidenham (Tutshill/	Mitcheldean ranks well for public transport, with

Sedbury) for housing need.	a score that is comparative with Newent and Tutshill/ Sedbury.
<b>Summary</b>	
Mitcheldean has a huge employment area proportionate to its population size, and thus punches above its weight in terms of employment and services. It also contains Dene Magna secondary school. It is well connected to both north and south with easy access to Gloucester and Ross on Wye via the A40. There is significant opportunity for renewal of the town centre, with several abandoned commercial premises which would benefit from redevelopment.	

### Tutshill/ Sedbury

<b>Snap shot</b>	
Total population	3,737
Number of dwellings	1,625
Housing tenure	72.8% owner occupied
Transport links	Good access to M48 (Severn bridge) providing good access to Bristol and Newport.
% Economically active residents	71.6%
Office of National Statistics profile	Suburbs City or larger town surrounded by inhabited countryside Sedbury: Older blue collar/ prospering older families/ Constrained by circumstances: Older Workers/ Thriving suburbs/ Prospering semis. Tutshill: Village life/ prospering older families

*\*Demographics based on NOMIS 2011 statistics for Tidenham Parish.*

<b>Employment</b>	<b>Services</b>
Tutshill and Sedbury do not contain any large employment generators with the exception of the Wyedean secondary school. The number of business rated premises is significantly lower than its population size.	Tutshill and Sedbury rate quite low for service provision in relation to the population size, and it is assumed there is significant retail leakage to services in Chepstow and further afield to Bristol.
<b>Housing</b>	<b>Travel</b>
Tidenham (Parish primarily contains Tutshill and Sedbury) rates as sixth for housing need, which is commensurate with its place on the settlement hierarchy in terms of population size.	Tidenham rates well for public transport provision, and is equivalent to parts of Cinderford and Coleford. It is assumed that these communities benefit from proximity to higher order service provision for Chepstow.
<b>Summary</b>	
The next largest settlement after the four market towns is the combined communities of Tutshill and Sedbury, which together have a combined population of 3,737. These two areas form a suburban belt around the town of Chepstow, Monmouthshire. These areas have direct access to higher levels and range of service provision due to their relationship with the small city of Chepstow (population 14,200) as well as being located at the foot of the Severn Bridge, which provides direct access to Bristol. Therefore, these areas have capacity for sustained growth going into the future.	

## Whitecroft/ Pillowell/ Yorkley

Snap shot	
Total population	1,281
Median age	44.5 (for Pillowell ward)
Households	557
Housing tenure	80.2% owner occupied 11.9% Social rented 5.6% Private rented 1.5% Living rent free (for Pillowell ward)
Transport links	Located on the A4136, with good linkages to the A40
% Economically active residents	66.1%
Office of National Statistics profile	Suburbs A hamlet or isolated settlement in inhabited countryside/ a village surrounded by inhabited countryside Village life

*\*Demographics based on NOMIS 2011 statistics for Pillowell Ward.*

Employment	Services
Whitecroft/ Pillowell/ Yorkley rates higher in terms of its business rated premises than its commensurate population size. It does not however, contain any larger employment generators.	Whitecroft/ Pillowell/ Yorkley rates higher in terms of its services and facilities than its commensurate population size. It is assumed that this may be because it is effectively three villages which have joined, and therefore inherits the village infrastructure and facilities such as primary schools from all three.
Housing	Travel
These three adjoining communities are within the West Dean parish, which rates as the highest in the district for housing need. It is difficult to ascertain whether this is commensurate with their population size, or if the size of the parish skews the figure.	Pillowell area rates fairly poorly for public transport provision, and is equivalent to places like Newland and St Briavels in its rating.
Summary	
The Whitecroft/ Pillowell/ Yorkley conurbation or hub is three separate communities which have been considered as one for the purposes of this study, due to their continuous, uninterrupted form and settlement boundary, which makes it difficult to conclusively state where one ends and the other begins. They effectively operate as a network. They are an anomaly within the settlement pattern of the district in this regard.	

## Conclusion

Towns and villages operate in relation to each other, with complex patterns of interdependence and interactions. They do not have unified service roles- they differ significantly in terms of retail, employment, community and residential functions, as well as their intrinsic character and cultural life.

This is due to a great number of interacting factors, including their geographical location and relative isolation or proximity within the network, which is often more attributable to geographical barriers and distance from the local arterial road network than actual distance between centres. The form and role of each centre and its function within the network will be primarily influenced by;

- a) The character and history of the town itself;
- b) the surrounding rural and geographical context;
- c) The influence of neighbouring urban areas and how this is directed through transport networks.

The four market towns of Coleford, Cinderford, Lydney and Newent all have a local service and employment role for their own residents, which promote self-containment and alternatives to car dependency within each centre. This makes them priorities for accommodating most of the districts future growth. Three main Forest of Dean centres- Cinderford, Coleford and Lydney are relatively small in population and employment terms, particularly in context of greater Gloucestershire; however they operate as a tight local network, and collectively account for a significant conurbation of population within the wider region.

Newent is an important centre for the north of the district, and Tutshill/ Sedbury are an anomaly for a predominantly rural district, as they form a suburb of neighbouring large town of Chepstow. Both enjoy a market advantage over settlements in the centre of the Forest, in terms of their accessibility and proximity to a greater regional network in the South-West England and southern Wales.

The market towns also have varying roles in supporting their own rural sub-catchments or hinterlands, which will dominate for higher level services and employment. Despite this, they may often be bypassed in favour of larger centres outside of the district by neighbouring village residents. Therefore these villages are often characterised by significantly higher mobility and car dependence.

The second tier of settlements of Bream, Drybrook, Lydbrook, Mitcheldean, Whitecroft/ Pillowell/ Yorkley and Tutshill/ Sedbury have the capacity to support future growth proportionate to the existing size, as do outliers from the main market towns, but development need to consider issues of scale and timing in relation to existing scale and functions.

The trend for reducing household sizes is a national one, and combined with a steadily growing population, demand for more housing in the Forest of Dean district can only be expected to continue. The rapidly aging population raise critical questions about the form and scale that this future housing provision will be. An aging population will also result in a reduction of economically active population, at varying levels across settlements. Conversely, centres with stronger employment role may need to be supported by additional accommodation for new working people and families.

Recommending growth scenarios is beyond the scope of this assessment; however there will be relationships between current functions and future growth. By understanding the existing role, form, character, trends and drivers which created the current network and hierarchy, we can better plan for future growth that is sensitive, appropriate and sustainable.

## References

- National Planning Policy Framework (2018);
- Forest of Dean District Core Strategy- Adopted Version (2012);
- Forest of Dean District Keynote- Settlement Hierarchy (2011);
- Rural settlements (1990) by J.A Stewart, Director of Planning & Leisure services, Forest of Dean District Council;
- Forest of Dean District Allocations Plan- Adopted Version (2018);
- Understanding Forest of Dean- demographic analysis (2015) Gloucestershire County Council;
- Coleford, Cinderford, Lydney and Newent town centre reports (2017) Forest of Dean District Council;
- Cinderford Northern quarter area action report (2012) Forest of Dean District Council;
- Forest of Dean Economic Forecast review (2015) Forest of Dean District Council;
- The Taylor review- Living, working countryside (2008) by Matthew Taylor, published by Department for Communities and Local Government, United Kingdom;
- Functional analysis of settlement (2005) Tyms and Associates, prepared for the South west regional assembly;
- Urban and Rural definitions for policy purposes for England and Wales (2013) Bibby and Brindley;
- Forest of Dean & Wye Valley Destination Management Plan (2015-2010).
- Land area of Gloucestershire, Data & Analysis Team (23 March 2018) Gloucestershire County Council.
- Accessibility assessment overview- Inform Gloucestershire (2016) Gloucestershire County Council

## Acronyms

AONB	Area of Outstanding Natural Beauty
FE	Further Education
FoD	Forest of Dean
FoDDC	Forest of Dean District Council
GCC	Gloucestershire County Council
LSOA	Lower Super Output Area
NPPF	National Planning Policy Framework
ONS	Office of National Statistics
RCS	Rural Services Centre
TTW	Travel to Work
SAC	Special Area of Conservation
SSSI	Sites of Special Scientific Interest



Ellwood					3			1		1												5		
English Bicknor					3						1											4		
Hartpury		3	3		3		1															10		
Huntley	3	3		3	3			1		1	1							1	1	1		18		
Kempley				3								1										4		
Littledean		6	3		3						2			1						1		16		
Longhope	3	3	3	3	3			1		1	1			2								20		
Lydbrook	3	9	3	12	3			1			6			1			1			2		41		
Lydney	9	12	3	3	12	2	1	1	5	2	5	2	2	80	9	1	25	10	2	5	21	2	4	218
Mitcheldean	3	3		3	3	2	1			1	1	1	1	4	2					1	3		25	
Newent	6	6	3	6	3	2	1	1	3	1	5	1	1	52	6		11	5	2	2	5		2	124
Newland		3											1										4	
Newnham	3	6	3	6	3	2				1			1	3							1		26	
Northwood Green												2											2	
Oldcroft				3																			3	
Parkend		6									1			3							1		11	
Redbrook	3	3		3	3						1			1									14	
Redmarley D'Abitot				3	6						1												10	
Ruardean		3	3		3							1				1							11	
Ruardean Hillside	3		3		3																		9	
Ruardean Woodside				3																			3	
Tutshill/ Sedbury	6	3		3	9		1			2	1	3		5	2			1			1		37	
Sling		3		6																			9	
Soudley		3		3	3							2											11	
St Briavels	3	3		3								2	1								1		13	
Staunton (near Coleford)		3		3								1											7	
Staunton/Corse		3		3									1								1	1	9	
Tibberton				3	3								1										7	

