



THE NATIONAL FOREST

National Forest Company

**The National Forest -
Economic impact and
future economic potential**

Final Report

March 2014

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National Forest Company

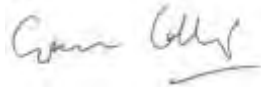
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Final Report

March 2014

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Executive Summary

The National Forest: a growing asset

The National Forest was inaugurated in the early 1990s, covering a 200 square mile area of the East and West Midlands. In late 2012 the eight millionth tree was planted by HRH The Duke of Cambridge at the official opening of the Football Association's National Centre, St George's Park, near Burton upon Trent, its National Forest location cited as an asset by the Football Association.

The Forest's area crosses the geographies of four Local Enterprise Partnerships and six local authorities¹, and is now home to around 220,000 people and nearly 8,000 businesses. 10 million people live within a 90 minute drive of the Forest.

The maturing of the Forest, and its proximity to several important urban centres, have enabled it to play an increasingly important economic role, not only as an attractive visitor destination, but also accelerating the structural shift towards a more diversified, productive and service-led economy, assisted by its natural geography in the centre of England.

As a growing economic and environmental asset, The National Forest has helped to re-position this important area of the Midlands as an increasingly popular place to live, work, visit and invest. For the Local Enterprise Partnerships, The National Forest offers a natural focus for cross-border investment programmes to capitalise further on the area's economic growth potential. Five key 'Growth Contributions' can be linked back to the Forest.

The National Forest: growth contributions to date

1. A new national visitor destination

The National Forest is recognised by VisitEngland as an emerging tourist destination. Visitor numbers have continued to grow despite the economic downturn. Between 2003 and 2012, tourist numbers are estimated to have increased by 16%. The visitor economy is increasingly valuable for the area – accounting for c. 4,460 FTE jobs (and c. 5,800 if leisure and recreation are included) in 2012.

Importantly, there remains scope for significant additional growth in visitor numbers, duration of stays, and jobs if further private sector-led investment in attractions and accommodation can be secured. Visitor revenue per head of population in 2012 was c. £1,460, slightly ahead of comparable areas, with potential for growth to c. £2,470 by 2024.

Conservative projections indicate the potential for more than 10 million visitor days by 2024, up 2 million on 2012 figures, supporting annual visitor revenues of over £600 million (nearly double 2012 revenues), and in jobs terms the potential for an additional 1,500 FTE jobs by 2020 and c. 2,800 by 2025.

The visitor economy potential is made all the more compelling and distinctive through its link to the woodland economy; there is a great economic synergy to be exploited (see over) which will also bring low carbon and environmental benefits, a rare combination and one that adds to the unique growth contribution of the National Forest.

¹ Charnwood, East Staffordshire, Hinckley & Bosworth, Lichfield, North West Leicestershire & South Derbyshire

2. Population and housing growth trajectory ahead of regional levels

From a population of just over 196,000 people in 1991, the Forest area has seen an 11.7% increase over the past 20 years. It is showing no signs of slowing, if anything accelerating, and by 2030, the population is expected to exceed 250,000, representing a 17% increase on 2011 figures. Notably, by 2030, NW Leicestershire is projected to increase by 25%. This compares against the regional projection of 14%.

National Forest local authority areas are now the destination of choice for 1 in every 10 people relocating to the Midlands from other parts of the UK.

Population growth and associated house building have sustained development rates well beyond the rest of the country - it is estimated that 2,650 more homes were built between 2004 and 2011 than the Midlands average would have anticipated. House building in the Forest area has continued throughout the economic downturn, and this trend is projected to continue. Virtually all the major house builders have a presence and all reference The National Forest within their marketing.

3. An increasingly important business location

The National Forest is an increasingly popular business location, attracting significant inward investment in recent years - the Football Association's £105m St George's Park investment is perhaps the most high profile, but it is not alone. Business growth in the Forest is also supported through access to an improving labour market, with higher and more adaptable skills to meet the needs of higher value business sectors. Prominent global companies now have their headquarters, production and/or distribution facilities in the Forest area. Since 2001, there have been more than 30 major inward investment decisions worth more than £1 billion of investment in and around The National Forest. The Forest also supports a growing SME base adding to local economic diversity and growth contribution.

This investment picture has been matched with structural economic change, a more balanced sectoral mix, and impressive employment growth in some higher value sectors traditionally weak in the Forest area. By 2030, the total GVA of the Forest area is expected to reach £5.6 billion, up from £3.3 billion in 2011.

4. A driver of property markets

Increased private sector investment in The National Forest has improved property market fundamentals, pushing rateable values of commercial property above the average for the East and West Midlands since 2000 - retail values have increased by 40%, industrial property by 30% and offices by 25%. For house prices, from a position where prices were behind the regional averages in the mid-1990s, median average house prices have trebled over the past 15 years, and are now ahead of regional averages. Accommodating the high levels of projected population growth will require an estimated additional 18,600 dwellings. The largest four sites allocations in The National Forest have provision for an additional 9,000 new homes up to 2030.

5. An exemplar low carbon woodland economy

The National Forest is a national exemplar in sustainable rural economic development. Its woodland economy contributes to employment, the value of the visitor destination (attractions and landscape), sustainable rural enterprise, GVA, energy security and development of the area's low carbon economy. Whilst woodfuel will not usually directly replace entire heating systems, it can make an important contribution to decarbonising the fuel supply. Woodfuel production from the National Forest will increase and by 2030 it is estimated that the Forest has the potential to offset the annual domestic supply of electricity to 26,900 homes (a town the size of Loughborough) and equivalent to 12.5% of homes across the six local authority areas. This will depend on the

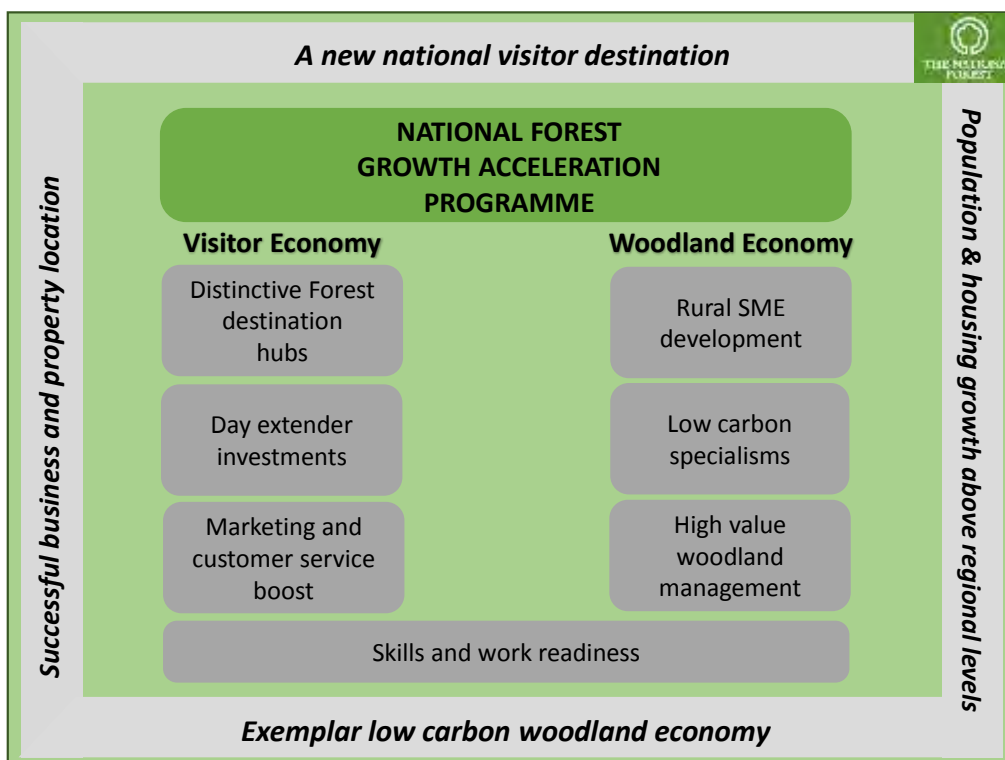
percentage that can be extracted and this requires investment in thinnings and infrastructure over the next ten years, 2014 – 2024.

Current and future growth contribution of The National Forest

National Forest Growth Acceleration Programme

The two pillars of the Forest, an emerging national visitor destination and its complementary woodland economy, can be maximised to make a significant and distinctive contribution to delivering the growth agenda. The National Forest Company and partners propose an integrated Growth Acceleration Programme over the next four years, based on these two pillars.

Current and future growth contribution of The National Forest



The Visitor Economy

A destination development plan will define the transition from a broadly mass market offer to niche markets and the profile of investments required for priority audiences. Overnight stays, which have increased faster than day visits, will be maximised through 'day extender' opportunities. 'Shoulder month' investment will extend the season.

The visitor product (existing and new) will be developed at the quality end of the market to achieve breadth and depth and there will be strategic investment in geographic hubs including Conkers.

The National Forest Way, opening in 2014, will provide a further opportunity for expanding the offer. Infrastructure improvements will make the most of the woodland theme, providing low carbon facilities and forest produce. Heritage and culture will be a focus for investment especially in the Heart of the Forest (linking to a Heritage Lottery Fund programme).

Business support will improve customer service, visitor information and facilities. The product will be more vigorously marketed, regionally and nationally, making the most of VisitEngland's 'emerging destination' designation.

The Woodland Economy

The Woodland Economy is intrinsic to the Forest-based USP of the Visitor Economy. **A sustainable rural enterprise programme** will take forward the area's low carbon economy whilst providing employment and SME development and realising the biodiversity value of the woodlands.

Woodland management increases visitor spend on forest products, from food to woodland courses, and in the longer term produces a high quality forested landscape within which the visitor destination expands. There is potential for new and innovative visitor facilities such as publicly accessible sawmills demonstrating 21st century multipurpose forestry.

Active management of the woodlands at the first thinnings stage will unlock the future value of the woodlands and provides for high value specialisation in management techniques. Research has shown that, to achieve maximum economic value from woodlands, landowners need financial encouragement, incentives to collaborate and technical advice to help them see the returns that are possible from active management. An integrated exemplar programme across the Forest will deliver this. Woodland business support will enable collaboration and innovation between landowners in managing the woodlands for economic, environmental and social value.

Biomass arising from the Forest will contribute to decarbonising energy and a low carbon demand and supply chain will be developed. The Renewable Heat Initiative will be promoted. The viability of a central marketplace for quality assured wood chips and logs will be explored. Expertise in biomass will be developed in conjunction with academic partners and research funds.

Skills, work readiness and employability

The National Forest has a track record of providing a setting for skills development, especially for those needing support to enter the job market. Programmes for apprentices, work with NEETs and qualifications in land and visitor-based management will be delivered with partners.

There will be substantial opportunities for training and work readiness for young people and those who face substantial barriers to employability. This will work across both pillars but with an emphasis on woodland management. This will fulfil the Forest's values of inclusion and opportunity, linked to economic activity and skills.

Delivery

The National Forest Company and partners will design a robust, fully funded and deliverable programme across the Local Enterprise Partnership areas. It is anticipated that delivery of this unique cross-border growth programme will begin in 2015/16. Depending on partner requirements, to be determined in 2014/15 and the amount of capital projects included, this is likely to be in the region of £5m - £10m. Funding will be secured from match provided by the National Forest Company and other partners, private sector investment, trusts and sponsorship, research programmes, rural development programmes, ERDF and Local Growth Fund via the Local Enterprise Partnerships.

1 Introduction

1.1 Purpose of document

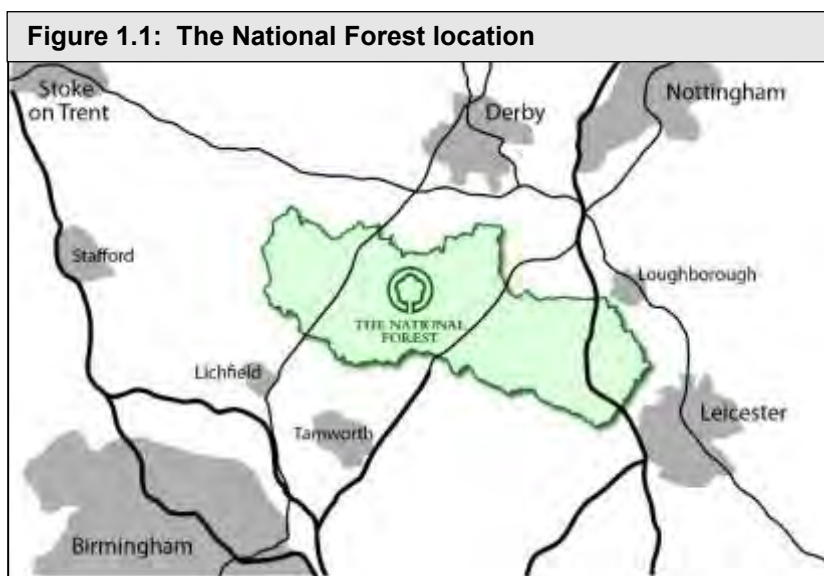
The National Forest has always been about '*much more than trees*'. Since its creation in 1995, brought about with cross party support, it is a working example of sustainable development with strong economic and social aims as well as environmental. The Forest covers a 200 square mile area of the East and West Midlands and in late 2012 gained significant public profile with the planting of the eight millionth tree by HRH The Duke of Cambridge at the official opening of the Football Association's National Centre, St George's Park in Burton upon Trent.

The maturing of the Forest in recent years and its proximity to larger urban centres means it has begun to play an increasingly important economic role providing an attractive destination for residents and visitors whilst also supplying workforces and resources to Derby, Leicester and Birmingham, amongst others.

The Forest's development over the past twenty years has coincided with a step-change in the structure of the area's economy in which it is located. A transition has occurred away from the area's traditional focus on primary production and its coalfield resource towards a diversified modern manufacturing and service led economy assisted by its natural geography in the centre of England and, in 2000, the opening of the important A50 link between the M1 and M6. Over this same period, The National Forest has begun to make a significant contribution towards reinforcing wider place-shaping activity – helping to re-position the area as an attractive place to live, work, visit and invest.

This report has been prepared for the National Forest Company, which leads and integrates the activity across the Forest, to assist it in developing future investment programmes in conjunction with the four Local Enterprise Partnerships (Leicester and Leicestershire, D2N2, Greater Birmingham & Solihull and Stoke and Staffordshire) within which The National Forest is located and with other potential partners and funding streams.

As the body that has driven the development of the National Forest, The National Forest Company (NFC) is a successful and highly respected organisation. All the reviews undertaken of the NFC's activities, whether these be about output performance, governance and management, and internal and external audit (including by the National Audit Office) all report significant achievements delivered, overseen and led by a strong team and Board.



The report aims to provide a high level review of the economic impact of the National Forest, both in terms of what has been achieved so far but also what can be achieved over the next 10 to 15 years given the prospect of new programmes of investment focussed on the particular strengths of The National Forest as an emerging national visitor destination and the developing potential of the Forest's woodland economy.

1.2 Background and economic geography

The National Forest Company was formed in 1995 with cross-party support to lead the creation of The National Forest. Linking the ancient forests of Charnwood and Needwood. The original idea for the Forest was first proposed in 1987 by the Countryside Commission.

10 million people live within a 90 minute drive and 29 million within a 2½ hour drive of the Forest. The Forest area itself crosses the geographies of six local authorities² and is now home to around 220,000 people and nearly 8,000 businesses. It surrounds and encompasses the towns of Ashby-de-la-Zouch, Burton upon Trent, Coalville, Swadlincote, and various outlying villages. The Forest area supplies workforces and resources to Derby, Leicester and Birmingham, amongst others.

Looking forward at the new economic geography of the Midlands, one of the National Forest's strongest attributes is that it offers its four Local Enterprise Partnerships (Leicester and Leicestershire, D2N2, Greater Birmingham & Solihull and Stoke and Staffordshire) the potential for cross-border activity - this will undoubtedly be important in shaping future discussions and creating exemplars of collaboration.

The table below summarises in headline terms population, jobs and GVA contributions for each of The National Forest's 4 LEP areas, and shows in proportional terms the area's importance particularly to Leicester and Leicestershire and Stoke and Staffordshire. To some extent however, these headline figures tend to mask the importance of The National Forest at sub-LEP area level, with the Forest credited for example by South Derbyshire District Council as a key driver for the economic growth the district has experienced since 2000.

The National Forest area in the Midland LEPs³			
	Population (2011)	Employee jobs (2012)	GVA (2011)
D2N2 LEP	2,110,300	873,998	£36.5 bn
D2N2 LEP in National Forest	48,423 (2.3%)	16,036 (1.8%)	£582m (1.6%)
Leicester and Leicestershire LEP	980,800	422,810	£18 bn
LLEP in National Forest	86,328 (8.8%)	41,476 (9.8%)	£1.7 bn (9.3%)
Greater Birmingham and Solihull LEP	1,946,500	823,318	£36.3 bn
GB&S LEP in National Forest	66,301 (3.4%)	25,434 (3.1%)	£1 bn (2.8%)
Stoke and Staffordshire LEP	1,098,300	421,552	£16.95 bn
S&S LEP in National Forest	66,301 (6.0%)	25,434 (6.0%)	£1 bn (6.1%)

1.3 NFC's current funding landscape

Defra is the source of the National Forest Company's (NFC) core funding, in 2014/15 providing £2.5m as grant in aid, and therefore Defra's vision for The National Forest as a national exemplar of ecosystems enhancement and of green infrastructure at a large scale, adding value to the built environment and bringing about improvements to quality of life and economic growth, is an important starting point for what The National Forest offers.

This vision, backed by funding, has set the direction for the NFC's activities. However, additional to this core funding, the NFC has been successful over the years at marshalling additional project funding either directly or via its local authority partners, the former Regional Development Agency

² Charnwood, East Staffordshire, Hinckley & Bosworth, Lichfield, North West Leicestershire & South Derbyshire

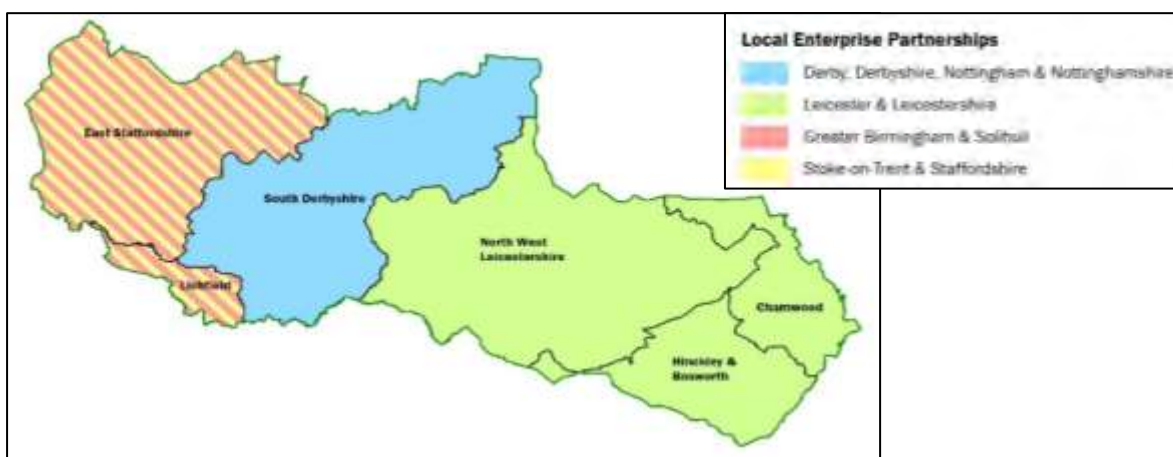
³ GVA by LEP from Buckinghamshire Business First analysis of ONS Regional Accounts, 2013 and Mid-Year population estimates, 2013

and Lottery sources such as the Heritage Lottery Fund. It also gains sponsorship from businesses and private individuals. NFC controls its administration costs tightly and typically generates considerable income beyond grant in aid relative to its back office function.

The new economic development landscape places the Local Enterprise Partnerships at the heart of decision-making on strategy and allocation of available Government funding for economic development. Local Economic Partnerships' focus on economic competitiveness, job creation, housing delivery and GVA is therefore a critical agenda driving the allocation of available economic development resources. The National Forest's contribution to the area's place shaping, and the re-positioning of this central belt of the Midlands as an attractive place to live, work, visit and invest is critical for LEP growth agendas.

Figure 1.2 highlights the four LEPs benefitting from The National Forest within their boundaries.

Figure 1.2: National Forest local areas and LEPs



1.4 The National Forest opportunity - making the most of the asset

The National Forest is now much better placed to demonstrate its relevance to this funding agenda than when it first started out.

NFC's 2013-14 Business Plan recognises that the Forest is maturing and, whilst the NFC continues to develop its proposition as a landscape and destination resource, it also recognises that there needs to be a shift in emphasis towards 'making the most' of the opportunities arising from the assets. This includes opportunities from forest and woodland management, visitor infrastructure, sport and recreation and the promotion of a wider customer base. These are increasingly important alongside the continuing objective of forest creation.

This provides an increasingly compelling platform from which to demonstrate economic potential and maximise new investment from potential funders.

The NFC has identified a number of strategic aspirations which will help realise The National Forest's potential over the coming years and is actively engaged in "making the most" of the Forest. There are a number of interventions that can open up the Forest to visitors (improving access to the woodlands and improving site infrastructure and orientation). The NFC is also identifying ways to improve connectivity between destination hubs created within the Forest to encourage visitors to stay longer – 'day extender opportunities' (options include cycle trail improvements, better marketing and promotion activity and improved navigation aids) and the NFC has also recognised the potential of utilising the Forest as a sporting venue that could host prominent events. This has the added advantage of bolstering brand marketing and awareness campaigns.

Beyond visitor resource potential, the NFC also recognises the growing potential of forest resources in supporting the continued development of a distinctive Woodland Economy. Woodlands are maturing and new woodlands are being brought into management, substantially increasing forest yields over the coming years. Enabling the utilisation of forest resources will support wider economic growth ambitions across the area, developing a distinct and sustainable sector specialism.

Achievements to date

The National Forest Company has been developing a distinctive offer for residents and investors since the Forest's creation. The offer blends a modern managed forest resource with an enriched ecological and visual landscape. It is providing a new timber resource that supports associated secondary processing activities, whilst at the same time driving a recreation and tourism economy offering rural diversification potential and engaging local communities in education, the arts and voluntary action.

£170 million of investment in Forest-related and regeneration project and programmes over the lifecycle of The National Forest has helped realise this outcome.

Through investment, development and community engagement activity to date, The National Forest has already brought about the following direct economic, social and environmental benefits to the local area:

- ❑ **Economic benefits** – The Forest has secured £170 million of public and private sector investment in Forest-related and regeneration projects and programmes since 1995, safeguarding or creating 330 jobs in forestry and farm diversification to forest uses and local woodland businesses. It has created a new recreation and tourist industry worth over £300 million per year to the local economy, with The National Forest attracting 7.4 million visitors in 2012 (GTS STEAM data). With the opening of The National Forest Way in 2014 - 75 miles of walking routes, this will provide a very real opportunity to boost profile, visitor numbers, visitor catchment, and also perhaps the length of visitor stay which will be a key factor in maturing the Forest's visitor economy and potential economic impact. Forest resources are being used to develop a growing renewable fuels industry and nine woodfuel installations have been installed in The National Forest area to date.
- ❑ **Social benefits** – Alongside its role in enhancing the attractiveness of the landscape and increasing access to rural areas, The National Forest has reinforced social cohesion across communities. Around 250,000 people have participated in Forest-related activities over the lifecycle of the Forest, and over 10,000 have been involved in 'Plant a Tree' events. 24,000 workdays have also been arranged in The National Forest by The Conservation Volunteers (TCV). As an educational resource opportunity, around 450,000 children have received environmental education sessions delivered through two facilities (Rosliston Forestry Centre and Conkers) and over 45 new sport and recreation facilities have been created in rural pursuits and over 100km of cycleways and trails. 77% of the forested area currently has some form of public access and plans are in place for public access to a further 8% of the Forest.
- ❑ **Environmental benefits** – Over 8 million trees have been planted since 1995, increasing forest coverage from 6% to 19.5% in The National Forest area through the creation of 6,780 hectares of mixed broadleaf and conifer forested land – this is equivalent to around 15,820 football pitches. Around 2,500 hectares of habitats important to wildlife have been created or brought back into management over the lifecycle of The National Forest and some 94 km of new hedgerows have been planted and over 150 new wildlife ponds have been created.

1.5 Approach taken to this review of economic impact

1.5.1 Building on previous assessments

This assessment draws on previous assessments undertaken of the economic impact of the National Forest. The two most recent and notable documents are:

1. *Eftec 2010: Initial Assessment of the Costs and Benefits of The National Forest*

This assessment was commissioned by Defra and The National Forest Company in response to a 2009 Defra Select Committee request to assess the public value / public benefits of The National Forest given the grant in aid from Defra and the Forestry Commission.

Eftec's approach was based on their previous 2007 work for the Forestry Commission assessing the value of the Public Forest Estate mapping a framework of benefits in line with Defra's Ecosystems Services approach.

For the National Forest, Eftec mapped projected public value essentially over a full 110 year period to the year 2100, looking at the scale of benefits across six categories (regeneration; biodiversity, wildlife; landscape; recreation; carbon sequestration; and timber production). Eftec's methodology used a variety of sources for ascribing monetary values to each, based on a willingness to pay / transfer value methodology rather than actual assessment. At present values, Eftec's assessment calculated a 4.8:1 benefit cost ratio up to 2100, indicating that in their view 'recreation' (i.e. the National Forest's Visitor Economy) delivers the greatest contribution, by a factor of 3 over the second most important benefit carbon sequestration, and more than 10 times the next three, landscape, biodiversity and regeneration.

2. *DC Research, 2010: Much More Than Trees 3 – the socio-economic impact of The National Forest*

Although acknowledging the Forest's impact on business investment; employment; housing investment and the improved image of the area, the Eftec study stopped short of ascribing value to these impacts, and therefore underestimated the full economic value of the Forest.

This second assessment undertaken at a similar time to Eftec's analysis focusses upon a wide range of socio-economic issues and indicators, importantly attempting for the first time a bespoke statistical geography for The National Forest area based upon lower super output areas (LSOAs) providing analysis of indicators such as deprivation, demographics and some employment data.

This document does provide a very comprehensive narrative across a very wide range of impacts. It points to the economic profile of the area performing very well compared to regional and national trends; strong growth in the Forest's tourism and woodland economies and ahead on some key indicators such as unemployment, economic activity rates and business start-ups. DC Research highlighted that despite the onset of the recession, The National Forest area very much seems to be holding its own.

At the community level, the assessment points to a growing sense of community engagement, cohesion and pride, with surveys showing community and visitors' support for the Forest is strong.

It also highlighted stakeholders' and partners' support for the Forest, and the expectation that the best is still yet to come in terms of the economic contribution that the Forest can make to the area's economies.

This report brings together the evidence in Much More Than Trees 3 and Eftec's reporting, alongside additional evidence gathered and collated as a part of this study. In keeping with LEP growth agendas over the coming years, this includes comprehensive socio-economic profiling of the Forest's area pointing to important impacts such as tourism and housing growth.

1.5.2 **Learning from Green Infrastructure approaches for assessing the impact of the National Forest**

The investment made in The National Forest over the last 20 years has created a nationally important Green Infrastructure (GI) asset. As such, consideration can be given to the work undertaken in recent years into impact assessment of GI approaches, in terms of a framework for assessing the impact of the National Forest.

Generally, there is broad acknowledgement within the literature that well designed, planned and managed green infrastructure can bring a wide range of benefits to local communities and places – and can underpin sustainable economic growth.

Eftec and Sheffield Hallam University's 2013 report for Defra and Natural England '*Green Infrastructure's contribution to economic growth: a review*' is perhaps the most recent contribution to the literature on the link between investment in GI and economic impact. This looks at the research evidence across six logic chains and points to the potential that investment in GI can deliver:

- 1) **Inward investment:** increasing the attractiveness of an area through investment in high-quality GI, increases inward investment and property values in the proximity;
- 2) **Visitor spending:** the attractiveness of the area and the quality of GI can impact on the number of visitors attracted to, and spending in, the local area;
- 3) **Environmental cost-saving:** GI provides important regulatory services such as pollution filtration, flood risk reduction and the mitigation of temperature extremes. Linked to this, the role that GI can play as a carbon sequestration resource;
- 4) **Health improvement:** pointing to the evidence that access to green spaces can have a positive impact on mental ill-health and stress, as well evidence that the quality of the outdoor environment is an important factor in encouraging daily exercise;
- 5) **Market sales:** the upsurge in interest in the resources that can flow directly from GI – either in terms of food production, or in the case of woodland and forest, forest products; and
- 6) **Employment generation:** direct employment involved in developing and maintaining GI.

These beneficial impacts highlight improvements that are brought about by investment in GI, providing the starting point for considering the economic benefits that can be realised from The National Forest. This review focusses on those impacts which are quantifiable and those which are likely to be of most relevance to growth agendas and the LEPs.

1.6 **Proposed framework structure for the review of impact**

The four benefit strands listed below are those which are likely to be of most relevance to LEPs. They offer the greatest potential for measured outputs and outcomes and are also areas where strategic interventions may deliver the quickest investment returns. Hence this assessment considers the following impact areas:

- AF1: Impact on the area's economic competitiveness;
- AF2: Inward investment and property market change (volume and value);
- AF3: Growth potential of the National Forest's visitor economy;
- AF4: Growth potential of the woodland economy; and potential contribution to energy and low carbon agendas.

'AF' – Assessment Framework

An appropriate timeframe for the assessment is considered to be the time period to 2030 which reflects LEP vision timescales.

The review also references wider impacts, particularly on local communities within and adjacent to the Forest.

Within the opportunities for the visitor and woodland economy there is an important skills and work readiness dimension and this is also referenced as part of a future investment programme in Section 6.

1.7 Structure of the rest of the report

The rest of this report reflects the LEPs' Assessment Frameworks and is structured as follows:

- ❑ *Section 2 (AF1)* - 'Impact on the area's economic competitiveness' provides a narrative on how the structure and shape of the economy of The National Forest area has changed over the first 20 years of the National Forest's life, based upon a detailed socio-economic review. This section also provides a look ahead to 2030;
- ❑ *Section 3 (AF2)* - looks in detail at inward investment and movement of the area's commercial property and housing markets;
- ❑ *Section 4 (AF3)* – covers the growth potential of the National Forest's visitor economy;
- ❑ *Section 5 (AF4)* - covers the growth potential of the National Forest's Woodland economy and potential contribution to energy and low carbon agendas; and
- ❑ *Section 6* – maximising the potential of The National Forest: proposed Growth Acceleration Programme.

2 AF1 Impact on the area's economic competitiveness

High levels of population growth, facilitated by high levels of net internal migration and high levels of housing supply, mean that The Forest has had a growing customer base since its creation. This long term historic trend is forecast to continue to 2030, enabled by significant planned future housing supply. The National Forest is therefore serving a greater population. This is being supported by opening up access to new woodlands and by long term improvements in Forest infrastructure.

The Forest area's economy is moving away from primary production towards a more diversified secondary manufacturing and service-led economy. The Forest is providing a key supporting role in this transition, and is particularly adding value to the growing visitor economy. It is also providing a new source of primary produce for downstream supply processing.

Supporting wider infrastructure improvements, The National Forest is helping create a desirable destination to live in and is helping to secure inward investment in the local economy. Through improved aesthetics, The National Forest is boosting the competitiveness of the local economy.

2.1 Supporting population growth

Some 219,500 people lived within The National Forest area in 2011 and the area has seen long term population growth (11.7%) over the past 20 years, arising from a combination of natural change (births/deaths/life expectancy) and a positive net internal migration from elsewhere in the UK. This means that the population of The National Forest area increased by 23,050 people over the period. The majority of this increase has however occurred since 2000.

Across The National Forest area, the 1990s saw 4,650 net additional residents, arising primarily from natural change and a net outflow of residents from some of the authorities. However, there has been a significant acceleration in The National Forest area's population since 2000, brought about by significant increases in net in-migration from within the UK, highlighting the area's growing reputation as an attractive place to live. For example, South Derbyshire has seen +11,900 net in-migrants since 2002 – equivalent to 1 in 5 of its 2001 population.

Over the decade to 2011, 19,800 net additional people chose to live within The National Forest area. Whilst 3 in every 4 of these relocated from elsewhere in the two Midland regions, Forest authorities were the choice destination for 1 in every 10 people relocating to the Midlands from elsewhere in the UK over the decade – out of a total of 69 local authority areas.

There has been significant house-building activity to accommodate this population growth and the three largest authority areas (NW Leicestershire, South Derbyshire and East Staffordshire) alone built 8,170 new dwellings between 2004 and 2011, an increase of 6.9% on the area's 2003 housing stock - significantly ahead of the regional average of 4.7% across the East and West Midlands. This means that in 7 years, the three main Forest local authority areas saw 2,650 more homes constructed than the Midlands average would have delivered between the dates.

Demand for housing is continuing to grow and this has resulted in significant increases in house prices. Median average house prices have trebled over the past 15 years, and are now ahead of regional averages. Future provision of housing has been identified across the authorities to accommodate future housing need and there are a number of strategic site allocations for housing within The National Forest area – the largest 4 sites alone have provision for an additional 9,000 new homes up to 2030.

Through improved aesthetics and a greater recreational offer, The National Forest is helping to form a focussed destination in which people want to live and work. Improving the offer of The Forest to residents will help secure and maintain workforces in the local area, affirming investment decisions in residential and commercial developments and bolstering the ability of the area to compete in the wider economy.

2.2 Employment growth and sectoral change

Private sector investment has also brought with it employment growth. There were 82,950 jobs within The National Forest area in 2012. The total number of jobs in The National Forest area has increased by 9.7% (+7,300 jobs) since 1995. The National Forest area has the potential to accelerate this growth rate further over the next 10-15 years.

As a former area of significant coal resource, much of The National Forest's historic industrial base has largely dissipated over the past 30 years, with a series of successive losses of various large scale extraction and production facilities in the area. Some of the area's former industrial strengths have however remained and the area has undergone a period of adaptation, restructuring and repositioning. The National Forest area has sought to take advantage of its competitive strengths in extraction and primary production by bringing forward its underlying strengths to a more modern economy that is focussed on more advanced secondary production activities. This process of structural economic change has resulted in a more balanced sectoral mix and by 2012 the National Forest area was characterised by the following sector specialisms⁴:

- Rubber and plastics;
- Chemicals
- Paper and Paper Products
- Electronics
- Mineral
- Mining and Quarrying
- Warehousing and Transport support
- Motor vehicles

Collectively these sectors provided 11,850 jobs in 2012 (14.3% of all jobs in The National Forest area), and over the first 20 years of the Forest there has been a 22% increase in the number of jobs in these sectors (+2,140 jobs). Business efficiencies in these sectors have meant they have significantly increased their contribution to total GVA (£3.3bn in GVA across all sectors in The National Forest in 2011). Advances in technology have led to increased output and productivity, but the contribution of these sectors to overall employment in the area has remained relatively static over the period – in part due to stronger employment growth elsewhere within The National Forest's sector mix, particularly in the service sectors. Financial, legal and property services, which traditionally have been very weak employment sectors in The National Forest area, have seen impressive employment growth over the past 20 years and although still a little behind, are well on the way to catching up with national averages.

There are also a number of other sectors which continue to provide an essential source of jobs, but which match in similar proportions to the national average (retail, tourism, public admin, education and health etc).

Greater diversification of sectors within the economy improves its resilience to economic shocks from internal and external sources. Fluctuations in economic performance within sectors, where some sectors may experience a period of contraction, are balanced and mitigated by improved performance in the remaining areas of the economy, which absorb jobs and business losses. Over time, this ebb and flow cycle of growth and contraction of sectors is smoothed out by overall performance, thus improving the resilience of an economy to cycles within the wider economy.

The National Forest area has seen considerable growth in secondary manufacturing and professional service sectors and is now poised for growth in the Forest area's new emergent strengths in the tourism and woodland economy sectors, which can now benefit from targeted investment programmes. As a key aspect of these emerging sectors, The National Forest is therefore improving the resilience of the local economy to economic cycles in the wider economy.

⁴ Where employment was proportionately at least twice the national average and there were more than 500 jobs within the Forest area

2.3 A location for significant inward investment

Business formation rates have been similar to averages across the Midlands and England since 2000, with 7,950 businesses operating across The National Forest area in 2012. There is some evidence that business survival rates have been above averages - with 46% of businesses in The National Forest area surviving the first five years of trading, compared to 44% regionally and nationally.

Significant inward investment in recent years has helped the Forest area keep pace with business formation, enabled by a good and continued supply of employment land across the area. Prominent global players now have their headquarters, production and/or distribution facilities in The National Forest area, including the Football Association's St George's Park National Football Centre, Environmental Scientifics Group, Keystone Group, Nestle and Holland and Barrett. Due to the connectivity provided by the A50, many other global players have chosen The National Forest area to set up regional and national distribution centres and have undertaken significant investment programmes - including DHL, Alliance Boots, Brantano, Palletforce, Superdry, Hobbycraft and Waterstones, and just outside the National Forest area Toyota, Futaba and JCB.

Increased private sector investment in The National Forest area has meant that the rateable values of commercial property have increased above the average for the East and West Midlands this century, particularly for retail and industrial use classes - albeit from a lower base.

2.4 Looking ahead – The National Forest in 2030

Demographic and economic forecasts suggest that The National Forest area will remain an attractive proposition to residents and businesses alike. Forecasts highlight the following trends in the National Forest area between now and 2030:

- ❑ **Population growth will accelerate and will stay ahead of regional averages.** By 2030, the total population of The National Forest area is projected to increase by a 38,150 (17.4%) to reach a total Forest area population of 257,650. This projected growth rate is significantly higher than projected growth across the Midlands (14.4% to 2030)⁵.
- ❑ **Population growth will result in higher levels of recreation.** An increased population base means that the population living within range of the Forest will rise significantly. The transition towards a secondary economy means that a high share of the catchment population will have a greater spending power within the local economy. It is also probable that higher levels of mobility and improved access to woodlands will increase the Forest's catchment area. It is therefore probable that demand for forest recreation will remain high over the coming years.
- ❑ **Economic restructuring will continue** - The National Forest area's economy is projected to continue to move away from primary production towards a more diversified secondary manufacturing and service-led economy. Particularly high growth sectors will be in professional and business services, wholesale and retail, tourism, construction, health and care, employment activities and arts and entertainment.
- ❑ **The local economy will see significant growth** - overall employment is projected to increase by 6,600 net additional jobs between 2014 and 2030 and GVA is forecast to increase by 70% between now and 2030 to reach £5.6bn.
- ❑ **Demand for property will remain high** - Accommodating high levels of projected population growth will require an estimated additional 18,600 dwellings, based on current dwelling densities⁶. Once constructed, The National Forest area will contain 110,900 dwellings in 2030.

⁵ ONS Sub National Population Projections, Mid-year (carried forward to 2030)

⁶ Census 2011

3 AF2 – Inward Investment and Property Market Change

The National Forest brand helps attract inward investment from nationally and internationally recognised organisations – perhaps the most high profile, the FA opened its £105 million National Training Centre near Needwood, Burton-upon-Trent in 2012. The strength of the area's location, its attractiveness and connections has made it an increasingly popular business destination. Business investment has boosted the property market. Rental values are increasing and the amount of commercial floorspace is growing faster than national and regional averages.

The National Forest is also a popular place for new homes. Population growth and investment from house builders have sustained development rates well beyond the rest of the country. This pace of change is not showing any signs of slowing, and demand for places to live in The National Forest is ongoing – large-scale new projects such as Drakelow Park (2,200 homes) and Branston Locks (2,500 homes), and 3,500 homes to the South-East of Coalville demonstrate the commitment of developers and investors to the area.

3.1 Inward investment

The National Forest is a popular business location and has attracted significant inward investment in recent years.

As noted, the strength of the area's connections to the rest of the country has been recognised by numerous national brands who have chosen to locate regional and national distribution centres in The National Forest area over the last decade.

Since 2001, there have been the following significant commercial investments in and around the National Forest:

- ❑ East Staffordshire – 13 large scale investments worth at least £310 million, including St George's Park and various national distribution centres;
- ❑ North West Leicestershire – Numerous multi-million pound investments including new headquarters for Ashfield in2 Focus, Price Waterhouse Coopers, Brantano, Norton Motorcycles, Premier Logistics, Marks & Spencer also the new headquarters for the FIA's new global electric racing series, Formula E Motor racing. The impact of the National Forest has been seen through the development of eco-friendly accommodation at the Radisson Blu hotel and the Forest YHA. Investment in the district looks to continue to grow, including the creation of a new super office for PKF Cooper Parry and substantial investment at East Midlands Airport and the development of the East Midlands Gateway Rail Freight Interchange];
- ❑ South Derbyshire – 18 investments worth at least £670 million including JCB Power Systems Centre, Bison Concrete Plant, new production and development at Toyota, and various national distribution centres.

The shape of the National Forest's towns is also changing though investment. For example, the Pipeworks in Swadlincote is a major retail and leisure-led regeneration scheme – a £15 million investment – which opened in 2011. This is highlighted by South Derbyshire District Council as a key example of the type of investment which only a decade ago or so it would not have been possible to attract. The Council cites The National Forest identity as a significant factor in the re-branding of the area and the contribution this has had on investment decision making. Coalville also has stronger National Forest references through recent investment and application of Forest-related design principles.

3.2 Commercial property

Continued investment in the economy within The National Forest has seen the market for commercial property become increasingly robust, with an increase in quantity, transactions and values.

Between 2002 and 2012, total commercial floorspace grew by 17% across the three main National Forest districts, as compared with just 1% nationally. The amount of office space increased by 15% - compared to 11% across England – reflecting the restructuring of the economy. The most striking growth however was in industrial floorspace which saw a 19% growth, compared to a retraction across the Midlands and England. This has been mainly driven by the important and sustained investment in logistics and distribution, which builds on the area's advantages of location and connection.

The increasing recognition of The National Forest as an investment location has also driven demand and an uplift in the value of commercial property.

In the decade to 2012 the average estimated rental value of commercial property in the three core National Forest local authorities increased by more than the regional average across all three major use classes. The rental value of retail property increased by more than 40%, industrial by over 30% and offices by more than 25%. By 2012 industrial property in The National Forest area had an average value of £36/sqm compared to the £33/sqm regional average.

Commercial investment and development in The National Forest is ongoing. For example, St Modwen has received outline planning permission for an 8 hectare business park at Cadley Hill in Swadlincote which will provide up to 95,000 sq. ft. of offices, light industrial and distribution premises. Drakelow Developments is committed to providing a 12 hectare business park on the mixed-use redevelopment of Drakelow Power Station.

3.3 New housing

Proportionally, the volume of new houses built across the three main National Forest districts has been greater than the regional and national averages. From 2004 – 2011 over 8,000 new homes were built across the districts. This represents an addition of nearly 7% to existing stock as compared to 4.8% across England, 5.6% in the East Midlands and 3.9% in the West Midlands, or the equivalent of an additional 2,650 new homes over this period if housing growth across the area had tracked regional averages.

Sites in and around The National Forest are clearly attractive to housing developers. In the year before the 2008 recession over 800 new homes were completed in South Derbyshire alone. Unlike in other areas, house building has continued throughout the economic downturn. In 2010/11 over 900 new homes were completed across the three districts – over twice as many, for example, as in the City of Leicester.

Investment in the housing market in the area continues apace. Various large scale new developments are planned in the National Forest. Outline planning permissions have been granted for the following developments:

- ❑ 2,200 new homes at Drakelow Park between Burton upon Trent and Swadlincote (Drakelow Developments and Eon);
- ❑ Up to 2,500 new homes at Branston Locks in Burton upon Trent (Nurton Developments);
- ❑ 660 dwellings south of Branston, Burton upon Trent (St Modwen); and
- ❑ 950 new homes at Upper Outwood, Burton upon Trent (Hallam Land Management).

The urban extension to the south east of Coalville could see up to 3,500 new homes built, more than doubling the town's population. The project is being promoted by a consortium of local and national developers including Bloor Homes, Taylor Wimpey and David Wilson Homes.

Despite this above average increase in housing supply, average house prices have risen significantly faster across the three main National Forest districts than across the wider region. In 1996 the average price in the three districts was over £1,500 below the Midlands average, but by 2011 it was over £2,800 higher. Given that house building levels have been comparatively high, this indicates that levels of demand – driven by factors such as people moving from other parts of the country – are also particularly strong in and around The National Forest.

There is a developing body of evidence in academic circles which has sought to monetise the link between housing values and the aesthetic appeal of landscapes, including forests⁷. While this report has not sought to directly ascribe the increase in house prices experienced to the presence of the Forest, there is strong evidence to suggest that The National Forest is positively contributing towards the improved attractiveness of the area and is therefore supporting a healthy housing market. The National Forest is itself being used as a Unique Selling Point (USP) by house building companies and in local property agents' marketing materials.

⁷ See Eftec, 2010, Initial Assessment of the Costs and Benefits of The National Forest

4 AF3 – Growth Potential of the National Forest’s Visitor Economy

The National Forest is an emerging tourist destination. Visitor numbers have continued to grow despite the economic downturn – total visitors are now nearly 7.5 million per year.

The visitor economy is increasingly valuable for the area – directly providing over 5,800 jobs in 2012. The average length of stays has increased and the number of staying visitors has grown faster than day visitors.

The development of the Forest’s visitor offer and associated economic activity is expected to continue strongly in the future. By 2024 over 10 million visitor days are expected – an additional 2 million from 2012 – and visitor revenue is projected to rise to over £600 million from current levels of around £320m.

4.1 Overview

The National Forest has been recognised as an “emerging destination” by VisitEngland. Developing the Forest into a new national tourism destination has been at the heart of The National Forest Company’s strategy from the outset. New woodlands and open spaces with public access have been created and investment focussed at key locations across the Forest area such as Conkers, Rosliston Forest Centre, the National Memorial Arboretum and Hicks Lodge, The National Forest Cycle Centre. Significant investment in a new Hilton Resort hotel has been secured in association with the opening of the Football Association’s St George’s Park facilities in Burton upon Trent. The aim has been to blend the area’s existing attractions with new Forest attractions based upon a growing network of new woodland, trails, sport and recreation facilities.

The opening of The National Forest Way – 75 miles of walking routes in May 2014 represents a significant opportunity for boosting the Forest’s profile nationally and developing The National Forest brand and strengthening the Forest’s product and marketing to visitors.

Growth of the Forest’s Visitor Economy to date has been impressive. Between 2003 and 2011, tourist numbers are estimated to have increased 16%, and tourism and recreation now accounts for 7% of all jobs in the area’s economy (5,800 jobs). However, there remains more to do to maximise the economic opportunities from the sector. Visitor revenue per head of population in 2012 was c. £1,460, slightly ahead of comparable areas, with potential for growth to c. £2,470 by 2024.

The National Forest is still very much a young and developing destination. VisitEngland’s recognition of the Forest as an ‘emerging destination’, highlights the potential of the area, given that visitor numbers have continued to grow even throughout the economic downturn. However, there remains room for growth, both in terms of visitor numbers, average length of stays, and jobs supported by the Forest’s visitor economy. Even relatively conservative projections indicate the potential for an additional 1,500 FTE jobs by 2020 and c. 2,800 jobs by 2025.

Looking forward, it is clear that there is still headroom for more private sector led investment in attractions and accommodation. Further promotion and marketing matched by investment to help deliver The National Forest Company’s tourism development action plan can help deliver this.

4.2 The National Forest’s Visitor offer and investments to date

The National Forest offers a wide range of attractions for visitors. Very early in the Forest’s development, the Conkers Discovery Centre was developed to help provide a strategic, central focus for the Forest. Investment over the last 10 years has also focussed on promoting key ‘gateway sites’ such as Calke Abbey (National Trust), Rosliston Forestry Centre, Snibston Discovery Park and Bradgate Park Visitor Centre reflecting efforts by The National Forest

Company to secure external funding and commitments by a range of partner organisations. Key investments have included:

- Mid-1990s – Conkers Discovery Centre;
- 1993 - Rosliston Forestry Centre, with continued developments;
- Mid-1990s – Calke Abbey (National Trust investment);
- 2001 – National Memorial Arboretum – 150 acres of trees and memorials dedicated to Remembrance;
- 2003 – Sharpe’s Pottery Museum, Swadlincote (Heritage Lottery Fund);
- 2007 – National Forest Caravan and Camping club site at Moira;
- 2007 – YHA National Forest, Moira;
- 2011 – Hicks Lodge: The National Forest Cycle Centre;
- 2012 – Hilton Resort hotel;
- 2014 – Stoneywell Cottage: National Trust property due to open.

4.3 The National Forest’s Visitor economy performance

The National Forest Company has commissioned annual volume and value tourism studies since 2003 from Global Tourism Solutions (UK) Ltd using its Scarborough Tourism Economic Activity Monitor (STEAM) model. This collates both real (from accommodation returns) and modelled statistics on tourism days, tourism numbers, visitor spending across four sub-market areas: serviced accommodation (i.e. hotels, B&Bs); non-serviced accommodation (i.e. self-catering) staying with friends and relatives and day visitors.

The figures below show marked growth over the period between 2003 and 2012 with total visitor numbers increasing from 6.77m to 7.42m (9.6% growth), but a corresponding growth in visitor days from 7.45m to 8.3m (11.6% growth).

National Forest Visitor Numbers (STEAM, 000's)						National Forest Visitor Days (STEAM, 000's)					
Category of Visitor	2003	2006	2008	2010	2012	Category of Visitor	2003	2006	2008	2010	2012
Serviced	192.7	228.8	216.5	218.2	283.5	Serviced	373.4	378.4	361.2	406.6	522.6
Non-Serviced	17.2	15.8	27	31.2	41.7	Non-Serviced	93.8	103.5	180.6	205.1	266.6
SFR	309	311.6	303	312.8	317.2	SFR	735.6	741.6	720.3	743.8	753.7
Day Visitor	6,251.4	7,021.3	7,424.5	7,195.1	6,773.3	Day Visitor	6,251.4	7,021.3	7,424.5	7,195.1	6,773.3
Total	6,770.0	7,577.5	7,971.0	7,757.2	7,415.0	Total	7,454.3	8,244.9	8,686.5	8,550.6	8,316.1

Analysis of GTS’ STEAM data shows that there has been strong growth in the base tourism performance figures (i.e. visitor numbers and visitor days). Interestingly, it shows signs that the National Forest’s visitor economy is not only growing strongly, but is strengthening in that staying visitors (both those in serviced and non-serviced accommodation) have grown faster than day visitor numbers. Looking at the visitor days figures, stays in serviced accommodation have increased by 40% over the 2003-2012 period and non-serviced accommodation by 184%, whilst day visitors have increased by a more modest 8.3%. There are also signs that the average length of visitor stays are increasing - serviced accommodation up from c. 1.6 days to 1.85 days per visitor, and non-serviced accommodation up from 5.5 days to 6.4 days per visitor.

The opportunity for The National Forest looking forward is to mature the Forest's appeal and to lengthen average overnight stays – particularly in the serviced accommodation market, given the marked difference in average visitor spend. A number of “oven-ready” sites have been identified for mixed use development in each of the emerging Local Plans. Many of these sites include provision for additional serviced accommodation.

4.4 Visitor economy growth potential projected to 2025

Further work has been undertaken with GTS to model the projected potential of the National Forest’s visitor economy if it continues to grow at a similar rate over the next 10-15 years and assuming that efforts are made to continue to invest in The National Forest destination product.

In forecasting future economic impact levels for the National Forest, GTS have looked at the trends in each of the individual Input Measures which inform their STEAM model over the period 2003 to 2012, and used this as a basis for estimating the levels for each Input Measure for a given future year. Data suggests a significant increase since 2008, higher than that of previous years. If this medium-term trend were used to quantify future growth, then estimates may be higher than presented here over the coming years. As a precautionary measure, longer-term trends have been used in the assessment.

GTS’ projections also include for projected visitor revenues and future job estimates within the sector as summarised below.

Projected visitor days (STEAM, 000's)				
	2012	2015	2019	2024
Serviced	522.6	633.4	686.4	769.1
Non-Serviced	266.6	310.8	368.9	474.3
Staying with Friends/Relatives	753.7	763.6	777.7	790.9
Day Visitor	6,773.30	7,550.70	7,899.10	8,357.30
Total	8,316.10	9,258.50	9,732.10	10,391.70

Projected visitor Revenues (STEAM, £m)					
	2003	2012	2015	2019	2024
Serviced	57.1	56.1	73.9	88.7	116.4
Non-Serviced	4.3	13.6	18.6	27.4	47.6
Staying with Friends/Relatives	31.8	32.6	35.8	41.3	49.1
Day visitor	204.6	221.6	268	317.7	393.1
Total	297.8	323.9	396.3	475.1	606.2

Projected Visitor Jobs (STEAM, FTEs 000's)					
	2003	2012	2015	2019	2024
Serviced	579	691	816	888	1,010
Non-Serviced	80	188	217	281	397
Staying with Friends/Relatives	330	339	356	404	469
Day Visitor	2,093	2,277	2,626	3,062	3,704
Indirect	876	963	1,122	1,325	1,655
Total	3,959	4,458	5,137	5,959	7,235

Using 2019 and 2024 as reference dates for this assessment, the projections point to the following potential growth of The National Forest Visitor Economy beyond GTS’ 2012 assessment of The National Forest visitor market:

- An additional 1.46m visitor days by 2019; and an additional 2m visitor days by 2024;
- An increase in the revenue value of the Visitor Economy from £323m to £475m by 2019 and £606m by 2024;

- ❑ An increase in the number of FTE jobs supported from 4,450 FTE jobs to c. 5,950 by 2019 and 7,200 jobs by 2024.
- ❑ STEAM employment estimates are reported in terms of FTEs - when comparing with SIC analysis, FTEs should be multiplied by a factor of 1.3 given that the baseline analysis calculates 5,822 jobs in tourism, recreation and leisure sectors 2012 (this includes full and part-time positions);
- ❑ Therefore converting GTS' analysis, shows the potential for:
 - By 2019: 1,501 FTE jobs or 1,950 jobs (equivalent SIC analysis); and
 - By 2024: 2,777 FTE jobs or 3,600 jobs (equivalent SIC analysis).

5 AF4 – The National Forest’s Woodland Economy and potential contribution to energy carbon and socio-economic agendas

Employment - by 2030, The National Forest would support a total of 64.1 FTE jobs, arising from a combination of 33.7 direct FTE jobs, 30.4 indirect and induced FTE jobs;

GVA – these jobs would generate £4.47m per annum in GVA for the local economy, arising from a combination of £1.28m in GVA generated from direct FTE jobs and a further £3.2m from indirect and induced FTE jobs. GVA from forest harvesting is highly productive to the economy and is ranked the 9th highest sector (out of 104 sectors) for generating added value to the economy from downstream effects⁸;

Destination enhancement, sport, recreation, education and community engagement: arising out of the multiple activities taking place in multipurpose, well-managed woodlands, there is considerable scope to build economic activity by SMEs, skills development and an economically beneficial woodland culture,

Energy security - energy supply from National Forest resources in 2030 has the potential to provide an annual domestic electricity supply to 26,900 homes (this is equivalent to a town the size of Loughborough) or the potential to offset the annual gas emissions to 5,400 homes; and

Carbon sequestration – it is estimated that The National Forest will be absorbing 73,700 tonnes of carbon in 2030. This is equivalent to 12.5% of CO₂ emissions from domestic electricity sources across the 6 local authority areas of the Forest in 2011⁹.

Woodland resource - The potential sales value of 25,500 tonnes of woodchip in 2030 is estimated to be £3.2m at current prices. This represents an increase of £2m on current yield prices from the Forest.

5.1 Introduction

The following section assesses the economic benefits of the National Forest’s woodland economy in employment and GVA terms by 2030, and also reviews the contribution that the woodland economy makes to a high quality forest destination, carbon mitigation, decarbonising energy and, importantly, the socio-economic and socio-environmental agendas of The National Forest.

The assessment draws on findings from *Quantification of the Forest Resource (Main Report), Update Report, June 2009, Evaluation of the National Forest, 2010* and wider research to determine forecast forest growth and the likely resource of forest products that can be harvested over the coming 15+ years.

The woodland itself provides the platform for a range of activities and services, from woodfuel to crafts and furniture, in addition to its important role as a recreational, educational and visitor destination resource. The increasing demand for forest fuels in recent years means that the potential economic returns from the resource are increasing. While the offer is broad, the focus over the coming years will be on the potential to develop production of woodchip and firewood logs as the main harvested resource and as the driver for critical first and second thinnings, as outlined above.

⁸ Scottish Government (2009)

⁹ North West Leicestershire, South Derbyshire, Lichfield, Hinckley and Bosworth and Charnwood CO₂ emissions taken from Local and Regional CO₂ Emissions Estimates for 2005-2011, DECC

Other kinds of businesses are also active and can expand. These include SMEs working in woodland crafts, food products and sports activities which may generate income. The potential economic use of forest products and services therefore includes:

- Fencing and garden products
- Crafts and Furniture
- Round timber for sale
- Sawn Timber
- Consultancy services
- Timber processing
- Woodland management
- Woodland creation
- Courses and recreation
- Non timber forest products.

5.2 Impact mechanisms – sources of impacts

This review focusses on the quantifiable benefits that will result from:

1. Direct and induced employment gains from the management of the Forest;
2. Indirect and induced employment gains from forest products processing industries;
3. Indirect and induced employment gains from destination enhancement, recreation, education, sport and engaging people in woodland
4. Energy security expressed in terms of offsetting traditional domestic electricity and gas supply outputs; and
5. The environmental benefits from carbon sequestration.

5.2.1 Economic Benefits - Employment and Gross Value Added (GVA)

The direct economic impacts from the woodland economy will arise primarily from efforts being placed on activities that maximise timber products that can be extracted from the Forest. The scale of this impact is projected to increase, from a mix of both increased yields from natural growth and from an increased area of the Forest being brought into active management (currently 46%, with the aim of achieving the national goal of two thirds of woodland in active management by 2018). Downstream indirect employment will be generated along the supply chain, as forest products move from primary production activities to secondary processing. Induced employment gains will also be created from earnings spent in the wider economy.

As this chain deepens and matures, there will be an increase in GVA from forest activities that generate employment either directly, or in downstream indirect and induced employment creation. A review¹⁰ of the supply chain for The National Forest found that there were at least 67 known markets and merchants operating that could utilise woodland resources from The National Forest, the vast majority of which were based in the Midlands.

Wider socio-economic impacts – there will also be potential for wider economic benefits to accrue from woodland management activities within the creative industries, recreational and educational sectors. The National Forest already has a range of community engagement projects and programmes which are benefiting local communities and increasingly, these are drawing on and adding to the economic value of the woodlands. During 2013, alongside significant volunteering schemes and community led projects, environmental education programmes saw over 38,000 schoolchildren and teachers visit the Forest to learn about habitats, and The National Forest Company is promoting the installation of a range of community led art installations across the Forest.

¹⁰ Woodland Management and Economy Resource, Markets for National Forest Timber and Wood Productions, Lockhart Garrett Ltd, January 2013

Through investment by the Heritage Lottery Fund community economic benefit is being explored, for example community woodfuel projects which increase the ultimate value of woodland whilst providing fuel with an economic value for participants, who also experience benefit for social networks and health. This kind of programme has the potential for expansion across the Forest.

5.2.2 Environmental Contributions – Energy security and carbon savings

Carbon sequestration – Forests and their underlying soils provide a carbon sink whereby carbon is removed from the atmosphere by trees as they photosynthesise. As the forest grows, more carbon is captured within the system. Around 50% of a tree's dry weight is carbon and a 100 year old oak contains 3 cu.m of carbon. Growth of The National Forest will therefore offset emissions elsewhere within the economy and have a positive impact towards achieving quotas for reduced greenhouse gas emissions under the Kyoto Protocol¹¹. Carbon offsetting is also an incentive for private sector sponsorship which is providing another source of investment income for The Forest.

Energy security and energy decarbonisation – The production of woodfuel can help ease rising pressures on energy supply in the UK. Whilst woodfuel will not usually directly replace entire heating systems, it can make an important contribution to decarbonising the fuel supply. There has been increased national policy interest in woodfuel resource, in part arising from significant increases in market demand for woodfuel products and through the advent of the Renewables Heat Incentive (RHI) in 2011 – which provides long term financial support payments to industrial, business and public sector bodies utilising renewable energy to heat their buildings. Woodfuel production in the UK was estimated to be 531,000 tonnes in 2011¹² from a combination of softwood and hardwood supply of biomass and processed wood fuels from sawmills.

The National Forest has the potential for very efficient local demand and supply chains and the provision of local energy is a contribution to energy decarbonisation. The focus will be on smaller high value markets, with high quality locally accessed woodfuel.

The production and markets for woodfuel and for biomass are distinctive. The National Forest is well placed to work with research bodies in developing the biomass potential of the Forest into the long-term and will be exploring this from 2014 as part of its forest management strategy.

5.2.3 Headline findings – Woodland Economy Benefits

Based upon an impact assessment exercise (the methods of which are outlined in Appendix 1) the headline economic benefits from the woodland economy study are as follows:

- **Employment** - by 2030, The National Forest would support a total of 64.1 FTE jobs, arising from a combination of 33.7 direct FTE jobs, 30.4 indirect and induced FTE jobs;
- **GVA** – these jobs would generate £4.47m per annum in GVA for the local economy, arising from a combination of £1.28m in GVA generated from direct FTE jobs and a further £3.2m from indirect and induced FTE jobs. GVA from forest harvesting is highly productive to the economy and is ranked the 9th highest sector (out of 104 sectors) for generating added value to the economy from downstream effects¹³;
- **Destination enhancement, sport, recreation, education and community engagement:** arising out of the multiple activities taking place in multipurpose, well-managed woodlands, there is considerable scope to build economic activity by SMEs, skills development and an economically beneficial woodland culture;

¹¹ Forest Creation and climate Change Position Statement, National Forest Company, 2009 and; Locking up our carbon in the National Forest, National Forest Company, undated

¹² Sawmill Survey, Survey of Round Fencing Manufacturers, 2011

¹³ Scottish Government (2009)

- ❑ **Energy security** - energy supply from National Forest resources in 2030 has the potential to offset the annual domestic electricity consumed by 26,900 homes (this is equivalent to a town the size of Loughborough) or offset the annual domestic gas consumption of 5,400 homes;
- ❑ **Carbon sequestration** – it is estimated that The National Forest will be absorbing 73,700 tonnes of carbon in 2030. This is equivalent to 12.5% of CO2 emissions from domestic electricity sources across the 6 local authority areas of the Forest in 2011¹⁴;
- ❑ **Woodland resource** - The potential sales value of 25,500 tonnes of woodchip in 2030 is estimated to be £3.2m at current prices. This represents an increase of £2m on current yield prices from the Forest; and,
- ❑ **Skills and employability resource** - Woodlands are exemplary settings for learning skills for employability, both technical and generic. The National Forest already provides a setting for young people and others with barriers to employability or a specific wish to work in the land-based sectors and this can be expanded.

¹⁴ North West Leicestershire, South Derbyshire, Lichfield, Hinckley and Bosworth and Charnwood CO2 emissions taken from Local and Regional CO2 Emissions Estimates for 2005-2011, DECC

6 Maximising the potential of The National Forest: proposed Growth Acceleration Programme

6.1 Growth Acceleration proposition

The two pillars of the Forest, an emerging national visitor destination with its complementary woodland economy offer the potential to make a significant and distinctive contribution to delivering the growth agenda.

The National Forest Company is proposing an integrated Growth Acceleration Programme over the next four years, based on these two pillars. Funding will be secured from match provided by the National Forest Company and other partners, private sector investment, trusts and sponsorship, research programmes, rural development programmes, ERDF and Local Growth Fund via the Local Enterprise Partnerships.

6.2 The Visitor Economy

A destination development plan will define the transition from a broadly mass market to niche markets and the profile of investments required for priority audiences. Overnight stays, which have increased faster than day visits, will be maximised through 'day extender' opportunities. 'Shoulder month' investment will extend the season.

The visitor product (existing and new) will be developed at the quality end of the market to achieve breadth and depth and there will be strategic investment in geographic hubs including Conkers. The National Forest Way, opening in 2014, will provide a further hook for expanding the offer. Infrastructure improvements will make the most of the woodland theme, providing low carbon facilities and forest produce. Heritage and culture will be a focus for investment especially in the Heart of the Forest (linking to a Heritage Lottery Fund programme).

Business support will improve customer service, visitor information and facilities. The product will be more vigorously marketed, regionally and nationally, making the most of VisitEngland's 'emerging destination' designation.

6.3 The Woodland Economy

The Woodland Economy is intrinsic to the Forest-based USP of the Visitor Economy. A sustainable rural enterprise programme will take forward the area's low carbon economy whilst providing employment and SME development and realising the biodiversity value of the woodlands.

Woodland management increases visitor spend on forest products, from food to woodland courses, and in the longer term produces a high quality forested landscape within which the visitor destination expands. There is potential for new and innovative visitor facilities such as publicly accessible sawmills demonstrating 21st century multipurpose forestry.

Active management of the woodlands at the first thinnings stage will unlock the future value of the woodlands and provides for high value specialisation in management techniques. Research has shown that, to achieve maximum economic value from woodlands, landowners need grant support, incentives to collaborate and technical advice. An integrated exemplar programme across the Forest will deliver this. Woodland business support will enable collaboration and innovation between landowners in managing the woodlands for economic, environmental and social value.

Biomass arising from the Forest will contribute to decarbonising energy and a low carbon demand and supply chain will be developed. The viability of a central marketplace for quality assured chips and logs will be explored. Expertise in biomass will be developed in conjunction with academic partners and research funds.

The National Forest has a track record of providing a setting for skills development, especially for those needing support to enter the job market. Programmes for apprentices, work with NEETs and qualifications in land and visitor-based management will be delivered with partners.

There will be substantial opportunities for training and work readiness for young people and those who face substantial barriers to employability. This will work across both pillars but with an emphasis on woodland management. This will fulfil the forest's values of inclusion and opportunity, linked to economic activity and skills.

6.4 Delivery

The National Forest Company and partners will design a robust, fully funded and deliverable programme across the Local Enterprise Partnership areas. It is anticipated that delivery of this unique cross-border growth programme will begin in 2015 / 2016. Depending on partner requirements, to be determined in 2014/15 and the amount of capital projects included, this is likely to be in the region of £5m - £10m. Funding will be secured from match provided by the National Forest Company and other partners, private sector investment, trusts and sponsorship, research programmes, rural development programmes, ERDF and Local Growth Fund via the Local Enterprise Partnerships.

Appendix 1: Woodland Economy Impact Assessment Methods

Forest Growth, Management and Yield - Projections

Growth projections for The National Forest up to 2030 have been taken from *Quantification of the Forest Resource (Main Report), Update Report, June 2009* (Eamonn Wall & Co, on behalf of The National Forest Company) and from *Evaluation of The National Forest 2010* (Eftec).

The Quantification Study used a range of existing monitoring data (spatial and economic) and mapping techniques to understand projected potential forest yields (the potential forest woodfuel resource) over a 25 year horizon (to 2032). The Evaluation report includes a high level total forested area growth projection over a 100 year horizon (to 2100). This impact assessment assumes both projections are broadly in line with each other.

It is recognised that NFC will revisit the extraction potential of the Forest in the next period, updating against current coverage and knowledge about extraction potential.

Indicatively, to understand the economic impacts, this assessment has sought to quantify the following broad areas of the Forest:

- ❑ **Managed Area** – this has been based on a proportion of woodland area currently under management (46%), modelling The National Forest Company's aspiration for a 1.8% per annual increase in total woodland area coming into management over the period to 2030 (based on discussions with The National Forest Company); and,
- ❑ **Likely Yield** – This is the total yield that could be harvested from forest management and is based on assumptions contained in the Quantification report - that the potential yield is 65% of the gross woodland area.



It also follows other assumptions contained in the yield-class (YC) model developed for the Quantification report. These consider age class distribution and types of new and existing woodland (Broadleaf and Conifer, young and established types), overall Forest growth and the utilisable area of woodland resource. A (then) hypothetical wood-chip powered heating systems in future years was also built into the assumptions developed for the model, alongside assumptions regarding management efficiencies – that there would inevitably be some degree of under-management which would constrain the actual levels of forest resource that is likely to be harvested.

The results of this modelling exercise provides a high level understanding of the gross area that is or is likely to come under management over the coming years, and the likely yield of forest products from the managed area. The projected area of managed woodland over the coming years is as follows:

- ❑ 2014 – 3,000 hectares managed (Total Forest area of 7,233 ha);
- ❑ 2020 – 5,000 hectares managed (Total Forest area of 8,739 ha);
- ❑ 2025 – 6,500 hectares managed (Total Forest area of 9,994 ha);
- ❑ 2030 – 8,500 hectares managed (Total Forest area of 11,249 ha).

Projected yield from forest resources (cu.m of managed resource by year)				
Species	2014	2020	2025	2030
Established broadleaves	5,197	6,426	7,450	8,474
Established conifers	8,896	11,000	12,752	14,505
Young broadleaves	107	1,874	5,155	9,256
Young conifers	1,403	3,557	5,885	8,697
Poplars	1,113	3,773	6,695	3,846
Total	16,717	26,630	37,938	44,778

The above estimates allow employment impacts from woodland management to be assessed and for a quantum for potential forest products to be understood. The potential yield of forest resource from the managed area of woodland is outlined overleaf.

Through a combination of natural growth of the Forest and an increase in the proportion of The National Forest that is brought into management the projection indicates that 44,778 cubic metres of forest resource per annum could be harvested from the National Forest.

A unit conversion (1 cu.m = 0.57 dry tonnes) has been used to convert the yield into the number of dry tonnes produced per year. This means that The National Forest could produce the following resource, depending on extraction rates:

- 2025: 21,500 dry tonnes;
- 2030: 25,500 dry tonnes.

Impact assessment – Economic and Environmental Benefits

In assessing the impacts of the National Forest, the findings from the yield modelling have been converted using national sources to understand the potential impact of the woodland economy by 2030. Each is explained below:

1. **Employment** – to estimate the likely scale of direct employment, it is possible to apply a conversion factor for gross forest area to net jobs. Using existing studies¹⁵ undertaken elsewhere, it is estimated that each 1,000 hectares of managed woodland will support directly 4 net FTE jobs and 3.6 indirect and induced jobs (0.9 indirect and induced jobs per 1 direct job (derived from Leontief Type II Output Multipliers¹⁶ for Forestry Harvesting);
2. **Gross Value Added** – GVA gains from direct employment activities have been taken from an average GVA per worker figure (£49,231¹⁷) for management and primary processing activities in the National Forest. (Indirect and induced GVA gains (£2.5 per £1 of direct GVA) have been derived from Leontief Type II Output Multipliers for Forestry Harvesting).
3. **Energy security** – Woodchip provides 870kwh of energy per cubic metre¹⁸. This has been used to quantify the total energy output of dry tonnes (250kg of woodchip per cubic metre¹⁹) in resources from the managed area of the National Forest. The potential home energy savings quantum is that an average domestic dwelling consumes 3,300kwh of electricity and 16,500kwh of gas a year²⁰.
4. **Carbon sequestration** – in estimating the levels of carbon sequestered by 2030, this study has projected the findings of a Centre for Ecology and Hydrology (CEH) report, produced on

¹⁵ The Economic Contribution of The Mersey Forest's Objective One-Funded Investments (October 2009), Regeneris

¹⁶ Scottish Government (2009)

¹⁷ Based on metrics for woodland management and primary production (ONS Forestry Statistics 2013, on behalf of the Forestry Commission)

¹⁸ Biomass Energy Centre, Typical calorific value of fuels, accessed January 2014

¹⁹ Biomass Energy Centre, Typical calorific value of fuels, accessed January 2014

²⁰ Based on typical domestic medium consumption (Ofgem, Typical domestic energy Consumption Figures, 2011).

behalf of The National Forest in 2004 and subsequent reporting by The National Forest of carbon sequestration benefits. This study anticipated that the Forest would absorb 43 million tonnes of carbon per year between 2008 and 2012. It does not account for any changes in forest age distribution over the period.

Appendix 2: Economic Impact Assessment and Investment Case

As part of our preparation for applying for LEP-related funding we have commissioned this updated economic impact assessment and outline of future investment to accelerate growth going forward. This focuses on the economic aspect of our mission.

The visitor and woodland economies and skills and work readiness would be the main areas for LEP-related funding and we would aim for an integrated programme across counties and LEP boundaries.

Key data from the report:

- 10m visitor days by 2024, a 25% increase on 2012 and representing steady, sustainable growth.
- Over £600m visitor revenue by 2024, nearly double that of 2012.
- Full time equivalent jobs in visitor economy, leisure and recreation, currently c5,800, to rise by 40% to 2020, reaching c8,000 by 2025.
- 70% growth in GVA to 2030, to £5.6bn.
- £1bn worth of investment in and around The National Forest since 2001.
- 111,000 dwellings by 2030.
- Population of over 250,000 expected by 2030 compared with 196,000 at the outset of the Forest.
- Expected population growth rate to 2030 of 17.4% is ahead of regional average of 14.4%.
- 1 in 10 of all those relocating to the Midlands from elsewhere chose The National Forest in the decade to 2011.
- 2,650 more houses delivered in three main authorities than the average 2004 -2011.
- 64 FTE jobs in the woodland economy by 2030 and more training and skills opportunities in addition.
- c£3m value of woodchip sales by 2030.