



DARTMOOR LOCAL PLAN
guiding planning applications in Dartmoor National Park

TOPIC PAPER 3

Design and the Built Environment

September 2019

This topic paper provides an overview of the issues and evidence used to inform Dartmoor National Park's local plan review.



Contents

1	Introduction.....	3
1.1	Objectives	3
2	Getting good design on Dartmoor	4
2.2	Local Materials	10
3	Mitigating climate change through sustainable construction	12
4	Residential Accessibility, Space Standards and Crime Prevention	15
4.1	Residential Accessibility	15
4.2	Residential Space Standards	20
4.3	Designing out Crime	21

1 Introduction

1.1 Objectives

- 1.1.1 This topic paper is one of ten topic papers which form part of the evidence base that supports the emerging Dartmoor National Park Local Plan. These topic papers have been produced to coordinate and consolidate some of the evidence used in drafting the emerging local plan. All the topic papers will be available to view online at:

www.dartmoor.gov.uk/living-and-working/planning/planning-policy/background-evidence

- 1.1.2 The purpose of this topic paper is to gather evidence and serve as a starting point for developing planning policies related to design and the built environment. Invariably the paper will cover issues which overlap or compete with those in other parts of the evidence base (e.g.SA/SEA, development viability, climate change mitigation and adaptation). The Topic Paper's aims are to:
- set out the importance of design in the National Park context;
 - review the current Dartmoor National Park Authority policy framework and its effectiveness;
 - draw on a wide range of source material including research, guidance and best practice to inform policy development; and
 - recommend how to best adapt policy so it ensures design is given due consideration and prominence in the local plan.
- 1.1.3 The topic paper's scope covers everything from the design of new development, extensions and alterations to existing development and the design of the local plan document itself.
- 1.1.4 The topic paper has been updated throughout the course of the local plan review to reflect new evidence or changes to national guidance or policy. The view of the local community, key stakeholders and partner organisations who all have an interest in the future of Dartmoor National Park forms part of the evidence base for the local plan. The Authority have therefore welcomed feedback on this Paper. The following summarises the changes made in each version:

Version	Changes made
Version 1 October 2017	Original topic paper
Version 2 December 2018	Updated to reflect 2019 NPPF
Version 3 September 2019	Updated to reflect changes in national sustainable construction policy and in response to DNPA research and evidence paper

2 Getting good design on Dartmoor

“Our standards of design can be so much higher. We are a nation renowned worldwide for creative excellence, yet, at home, confidence in development itself has been eroded by the too frequent experience of mediocrity.”

Ministerial Foreword, National Planning Policy Framework [2012]

- 2.1.1 Good design is indivisible from good planning. Good design is not inevitable, it is an iterative process which needs to be worked at and championed. Good design is not limited to high quality architecture, but is also integral to a place’s spatial vision¹.
- 2.1.2 Dartmoor National Park is a place with a diverse array of special qualities which are widely celebrated, and protected by national planning policies. With this comes great privilege, in that the National Park Authority is able to prioritise conservation of the National Park’s landscapes, historic buildings and wildlife over national development priorities, such as volume house building. But it also comes with great responsibility; to ensure that development which does occur contributes to the National Park’s significance and its architectural legacy. And the Authority must do this whilst trying to ensure development is viable, inclusive, environmentally friendly and affordable. Balancing the need for change with the conservation of a national asset is no easy task.

Why design matters

Design affects everything we make and most things we use, it affects how we live, how we travel, the time we spend doing things, how much things cost, the materials we consume and the waste we produce. Design also reflects our values, interests and says a lot about not only who we are, but who we want to be. The design of our built environment is no exception.²

The built environment forms the stage upon which we perform our lives, it affects how we act, how we feel, shapes our sense of national and local pride and forms part of our identities. The history and culture of a nation are written in its buildings, public spaces, towns and cities. No building, street or public space exists only for the people who paid for it, designed it or who use it, everybody has to live with it; bearing the costs if it is designed poorly or reaping the benefits if it is designed well. Every new development has the potential to transform people’s quality of life, stimulate the economy and enhance the environment.²

In planning when we think about whether a project is viable we typically deal with three main project elements; quality, time and money. We are generally told and work on the assumption that quality can only be improved at the cost of time and money. The genius of great design is when a solution arises which improves quality while also reducing time and cost. Great design has the ability to deliver a building which is valued by the community, its owners and users, is more sustainable and is quicker and cheaper to build than was previously thought possible.

- 2.1.3 The National Park Authority has adopted a Design Guide as a Supplementary Planning

¹ Commission for Architecture and the Built Environment (now the Design Council) (2009) *‘Planning for Places: Delivering good design through Core Strategies’*

² Commission for Architecture and the Built Environment (now the Design Council) (2009) *‘Good Design: the fundamentals’*

Document which supports the adopted policies of the local plan. Our Design Guide is an expansive guide to the styles, materials and features of Dartmoor's local vernacular and identifies the characteristics of the built environment which makes Dartmoor distinctive. It is used to support local plan policy by guiding proposals and informing decisions. The challenge for the new local plan is to ensure that messages consistent with the Design Guide are clearly stated, in its language and presentation, so that the high quality design encouraged by the Design Guide is recognised as a key strategic objective.

2.1.4 The Design Council has provided guidance on how best to embed design quality into emerging strategies which can be summarised in the following key messages¹;

- **Tell the story** – Tell the story of the place, explain how it works, its issues and highlight its qualities and distinguishing features.
- **Set the agenda** – Use the strategy to say what is wanted for the area, express aspirations and be proactive and positive about the future of the place and say how this will be achieved. Set out what is expected in terms of design quality and where necessary provide links to guidance and supplementary planning documents.
- **Say it clearly** – make the strategy relevant and clearly understandable to a wide audience. Use diagrams to inform text and communicate the strategy and show what quality of place means.

2.1.5 The important message is that good quality development is not delivered simply through a policy on design, but through its incorporation into an integrated spatial approach.

2.1.6 National Planning Policy Guidance talks of the need to establish clear and easy to follow design policies and processes. To do this there first needs to be a set of design principles which are important to the Dartmoor context and it is expected that new development should meet. We have reviewed and expanded the design principles included in current Policy COR4. A revised set of design principles have been compiled taking inspiration from a variety of sources^{1 3 4 5}. The design principles are as follows:

- **Character**
 - Encourage developments with a clear and distinctive character which respects local character, vernacular and materials
 - Encourage development which contributes to the National Park's cohesive and vibrant communities
 - Promote quality and variety of accommodation
 - Ensure architectural taste or style is not arbitrarily imposed and innovative design, including contemporary design, is encouraged
 - Refuse planning permission for poor design
- **Environmental sustainability**
 - Achieve efficient use and protection of natural resources (promote a fabric-first approach, maximise energy efficiency, minimise the use of non-renewable resources and minimise the generation of waste and pollution)
 - Enhance biodiversity
 - Design for change and future adaptability
- **Access and Movement**
 - Ensure ease of access to new development and existing services through inclusive design, well located development and adequate parking
 - Promote sustainable means of travel and easy access to them

³ Design Council (2012) 'Building for Life 12: The sign of a good place to live'

⁴ Welsh Government (2016) 'Technical Advice Note: Design'

⁵ Design Council (2012) 'A Design Wayfinder'

- **Community safety**
 - Ensure attractive and safe public spaces and security through natural surveillance

What's vernacular architecture and why is it important on Dartmoor?

Vernacular architecture can simply be understood as design based on local needs, heavily influenced by the availability of local building materials and techniques. It is buildings built by local people, often as a community, using what materials and know-how are available locally. Historically on Dartmoor buildings were built unselfconsciously, to be functional and in the process locally distinctive vernacular styles were effortlessly created¹⁰.

Before central heating, air conditioning and modern insulation vernacular design had to make best use of local materials to make buildings comfortable in the local climate. Staying warm meant making best use of warmth from fire, animals and the sun. In Devon, traditional cob walls containing straw provided shelter and insulation. High on Dartmoor, thick granite walls provided effective shelter from high winds and heavy rain and housing designs included shippons where animals were kept to provide warmth.

Vernacular architecture reflects the physical attributes and culture of an area, it provides a clear sense of place and, because it is sourced locally, it is coincidentally often far more sustainable than today's buildings. Dartmoor's vernacular is fundamental to what makes the National Park look and feel like Dartmoor.



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- 2.1.7 The current Core Strategy succinctly sets out the special qualities of the National Park identified through consultation in the National Park Management Plan 2007. The latest iteration of the Management Plan has updated these and given them increased prominence which should be reflected in the new local plan. Many of the special qualities identified are directly and indirectly relevant to the character and design of Dartmoor's built environment and this should be highlighted.
- 2.1.8 The Issues Paper 2016 highlights uninspiring design and the erosion of Dartmoor's architectural legacy as one of the development issues which the National Park is facing, particularly caused by the proliferation of repetitive housing designs. The cause of this issue is not easy to pin down and nor is it specific to Dartmoor, it is a common criticism of housing development across the country. The Authority have always worked hard to further design and, given the National Park's status as a national asset, it is considered particularly important to continue this and reflect on what has and hasn't worked.

2.1.9 One element of the problem is that the volume housing industry does not generally want to deliver bespoke designs. All too often on Dartmoor we see house builders bring forward a pre-designed rendered box and propose to clad it with local-ish materials or add a stone porch to make it fit in. The resulting designs are not so bad that planning officers are able to refuse them, but they are often bland, uninspiring and certainly do not fulfil the creative potential of the sites they occupy or our aspirations of modern living. Good quality design which responds to a site's location and its surrounding townscape is all too often thought of as a costly and expendable addition to a housing scheme which gets in the way of delivering the cheap housing we so desperately need to get ourselves out of the housing crisis. The cost is that we end up with new development which looks the same up and down the country and the distinctive architectural legacy of Dartmoor's past is gradually eroded.



Examples of development in the National Park criticised for being undistinctive in our Issues Consultation. ©DNPA

Recommendations for Policy

2.1.10 There is no easy solution to the problem of mediocre design, it is a societal problem which needs to be solved at a societal level. It is not a problem the local plan can fix on its own. What we can do is ensure that every opportunity to encourage, promote and permit high quality innovative design is taken. We can also try to encourage public debate about the type of places our communities would like to live in so that we can better meet the desires of our community.

2.1.11 As an alternative to the volume housebuilder, self and custom build housing has been heralded as a delivery model which generates more innovative design. Self and custom builders are more likely to live in their home for a long time and are therefore likely to spend more time perfecting their design and contributing to their communities. They have a vested interest in ensuring their houses integrate well with existing development and they are also more likely to use local trades to achieve this. Research by the National Custom and Self-build Association (NaCSBA) cites that an average of 50% of houses delivered across Europe are done so through self-build, with countries such as Austria (82%), Belgium (65%), Italy (65%) and Sweden (65%) achieving far higher proportions. In comparison the UK

achieves just 8%⁶. NaCSBA report that finding land and gaining planning permission are the biggest hurdles for would-be self-builders⁷.

- 2.1.12 Similarly small developers working only on one or two sites at a time are more likely to take care to deliver high quality products because their reputations rely on it. Research by the Home Builders Federation⁸ indicates small developers have been in decline since the recession, a third of small developers ceased building homes between 2007 and 2009 and have not recovered. The research also suggests that small developers are struggling to find sites, as often they are outbid by large housebuilders. With the size of the average permitted housing scheme growing in size by 17% in less than a decade⁸ their market position seems to be worsening.
- 2.1.13 The local plan could help custom and self-builders and small developers by creating development opportunities which are more likely to favour them, such as
- providing for a wide range of sites within the local plan, including small sites (10 units or less) and infill sites which are more likely to be taken up by small developers and self-builders
 - continuing to use the self-build register to assess the needs of would-be self and custom builders in the National Park and considering if need is sufficient to make bespoke self/custom build site allocations or ensure larger developments provide a portion of serviced plots
 - identifying brownfield sites by 31 December 2017 as required by the [regulations](#) and carefully consider whether any sites are suitable for giving planning permission in principle, whilst having particular regard to the views of the local community and local need
- 2.1.14 The precise balance of site allocations in the local plan will be assessed further in the Housing Topic Paper with regard to whole plan viability, local need and ensuring site allocations will be sufficiently profitable to deliver infrastructure necessary for development and that identified by communities.
- 2.1.15 There are also a number of additional actions the Authority could take outside the local plan. As a generalisation, current design guidance for new housing developments on Dartmoor is heavily focused on conservation of Dartmoor's historic architectural vernacular. This is a sound approach for conversions, extensions or development in particularly valued or sensitive historic settings where new development needs to conserve and appear at one with existing structures. However, some developments, particularly larger schemes, may be proposed in areas considered to be less sensitive, perhaps where there is no strong vernacular or there is limited historic context. In these cases a conservation approach can lead to poor copies of Dartmoor's vernacular and the type of bland, repetitive and undistinctive development criticised above. It is therefore important to consider whether the current approach is stifling innovative, distinctive, place shaping development and whether it is going to deliver a distinctive modern architectural legacy fitting of Dartmoor's National Park status.
- 2.1.16 As stated above good design needs to be worked at and championed. In recognising this the Authority may wish to take a slightly more bold approach to design quality in the National

⁶ Nation Self Build Association (2013) *'Presentation from Federation of Master Builders'*

⁷ Nation Self Build Association (2013) *'A second progress report to Government on the implementation of the Action Plan to promote the growth of self-build housing'*

⁸ Home Builders Federation (2017) *'Reversing the decline of small housebuilders: Reinvigorating entrepreneurialism and building more homes'*

Park by encouraging the evolution of a contemporary vernacular which interprets and develops the historic vernacular. Using what has gone before as a springboard to take us somewhere new. A contemporary vernacular would still draw on Dartmoor's traditional vernacular principles, but take into account modern day materials, methods, financial and energy requirements and contemporary styles to create distinctive modern schemes that fit their surroundings and generate a sense of place, community and regional identity. Inspiration can be taken from London's emerging modern vernacular⁹ which has adapted historic forms and patterns to establish a high quality, distinctive and unambiguous street-based style which is unquestionably contemporary and recognisable as belonging to London. The approach is also the subject of a recent RIBA publication¹⁰ which reviews a broad range of exemplar projects where vernacular principles have been applied to deliver locally distinctive contemporary designs. The Authority could take more of a leading role in promoting a similar evolution to the Dartmoor vernacular by:

- explicitly allowing for and encouraging high quality contemporary design approaches which reference the local vernacular in its design principles and design guidance;
- encouraging bespoke design solutions at pre-application and actively discouraging repetitive and undistinctive housing designs; and
- championing exceptional design and encouraging public debate around design matters through a design award.

2.1.17 A design award could be a key way for the Authority to take a leading role in promoting high quality design, including a contemporary vernacular. A design award could be used to:

- recognise and incentivise design achievements in the National Park;
- raise awareness for good design;
- open public debate on what is good design and how our communities want to live, thereby allowing the Authority to better understand and meet their needs; and
- inspire improvements in future design quality.

2.1.18 For major applications the Authority may sometimes feel a second opinion and specialist advice would help raise the bar of design quality. In these circumstances the Authority can encourage applicants to submit their schemes for review by the South West Design Review Panel who provide independent, multi-disciplinary, expert advice on design matters within the south west region. An important cornerstone of this advice is built around the principles of Building for Life 12 (BfL12)¹¹, a government endorsed industry standard for well-designed homes and neighbourhoods.

2.1.19 BfL12 is a useful tool designed to help local planning authorities comprehensively assess the quality of proposed and completed developments, although it is generally urban, rather than rural, focused. On this basis the Authority should consider requiring that schemes over a certain size include an assessment against the BfL12 principles in their Design and Access Statements. This will go a long way to ensuring that important design principles are thought about prior to application and will assist officers' appraisals. Requiring developments to achieve Built for Life standard would not be realistic because some of the principles, for example public transport and facilities and services, will not necessarily be relevant to the small scale rural developments generally seen within the National Park. The

⁹ Urban Design London (2012) 'A New London Housing Vernacular'

¹⁰ Clare Nash, RIBA (2016) 'Contemporary Vernacular Design: How British housing can rediscover its soul'

¹¹ Design Council (2015) Building for Life 12: The sign of a good place to live
http://www.designcouncil.org.uk/sites/default/files/asset/document/Building%20for%20Life%2012_0.pdf

2018 NPPF paragraph 129 encourages authorities to use these tools to help improve design quality.

2.1.20 Current Policy COR4 and DMD7 are aspirational in their want for high quality development. In reviewing these policies the design principles stated above should form the basis of a strategic design policy. This policy pre-ambule should also highlight the precise features of the urban environment which are valued in the Dartmoor context and against which proposals will be assessed, such as:

- Encouraging a strong sense of place and reinforcing local character through maintaining and enhancing local townscape, street patterns and frontages and their relationship with landscape character
- Respecting local vernacular form and scale, and promoting high quality standards of contemporary design in buildings and the spaces and surfaces between them, in terms of:
 - urban grain, with respect to the arrangement of streets, plots and buildings in determining the texture and density of settlements;
 - the character and appearance of landscape, landforms and open space;
 - density and mix;
 - scale, in relation to its surroundings, views, vistas and skylines;
 - massing, in relation to other buildings and spaces;
 - the relationship between public and private space; and
 - the texture, colour, pattern and durability of materials, and techniques and elements of detailing used.

2.2 Local Materials

2.2.1 Particularly important to the Dartmoor context and its vernacular is the use of locally sourced materials, such as stone, slate, wheat reed thatch, metal sheeting and lime render. In encouraging design which respects Dartmoor’s vernacular the local plan should promote use of these materials.

2.2.2 There is currently very limited extraction of building stone within Devon, primarily confined to a few types of stone in the west and north of the county. Where traditional stone is a strong element underpinning the individual character of many of Dartmoor’s settlements lack of availability can sometimes lead to the use of inappropriate materials causing visual detriment and in some cases an increased rate of building decay.

2.2.3 Current local plan policy allows for the re-opening of quarries for small scale extraction to supply particular projects where the impact on landscape, environment, highway network and local amenity is acceptable. This policy has been successful in allowing local stone to be supplied to important projects, for example Blackenstone Quarry supplied granite for the National Trust’s restoration of Castle Drogo. This policy will continue to be an important means of positively encouraging use of local stone in the new local plan. A separate Minerals and Waste Topic Paper will consider evidence and policy around building stone quarrying in more detail.

Table 1 – Availability of local stone^{12 13}

Building Stone	Use	Location where currently worked
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¹² Devon County Council (2017) ‘Devon Minerals Plan 2011 - 2033’

¹³ English Heritage (2012) ‘Strategic Stone Study: A building stone atlas of Devon’

Bude formation	Structural and decorative	Beam, Torrington Bableigh Wood, Parkham Newbridge, Dolton
Dartmoor Granite	Structural and decorative	Blackenstone, Moretonhampstead
Cornish Slate	Roofing, structural and decorative	Delabole Trevillet, Tintagel
Morte slates	Roofing, wall hangings and rubble construction	Mortehoe (near Woolacombe)
Pickwell Down Sandstones Formation	Structural and decorative	Vyse, Braunton
Pilton Mudstone (sandstone element)	Walling and paving	Bray Valley (currently only aggregate) Hearson, Swimbridge
Tavy Formation (slate)	Structural and decorative	Mill Hill, Tavistock Yennadon, Yelverton
Westleigh Limestone Formation	Structural and decorative	Westleigh, Burlescombe

2.2.4 Other local materials are generally widely available. The constituent materials for cob are widely available on the periphery of the National Park, particularly in the South Hams. Devon and Cornwall are the largest producers of wheat reed thatch in the UK. Lime and metal sheeting (steel, or aluminium) are freely available throughout the UK.

3 Mitigating climate change through sustainable construction

- 3.1.1 The evidence for climate change and its likely effects on Dartmoor are discussed in the Natural Environment Topic Paper. This topic paper addresses how the local plan can help mitigate the effects of climate change through the design of new buildings.
- 3.1.2 Energy from fossil fuels consumed in the construction and operation of the UK's buildings accounts for approximately 40% of national emissions of carbon dioxide¹⁴. 85% of the 2012 building stock will still be standing in 2050¹⁵. Therefore designing development which is energy efficient, both in terms of its embodied energy and the energy consumed in its everyday use, and has low environmental impact is crucial to the UK's contribution to mitigating global climate change. It is also clear from this that retrofitting will be a key method in achieving carbon reduction targets¹⁷.
- 3.1.3 The secondary benefit of energy efficient homes is their affordability. Homes which are more energy efficient are cheaper to run. By reducing the cost of energy as a component of household outgoings the affordability of housing is improved without having to artificially depress values.
- 3.1.4 The English National Parks and the Broads Circular 2010¹⁸ clearly sets out that sustainable development is a key strategic objective for the National Parks and the Broads. The document's future vision for the National Parks is to create places where:

“Sustainable development can be seen in action. The communities of the Parks take an active part in decisions about their future. They are known for having been pivotal in the transformation to a low carbon society and sustainable living. Renewable energy, sustainable agriculture, low carbon transport and travel and healthy, prosperous communities have long been the norm.”

¹⁴ UK Green Building Council (2019) <https://www.ukgbc.org/climate-change/>

¹⁵ Committee on climate Change (2013) 'Progress Report to Parliament'

¹⁶ HM Treasury (2015) 'Fixing the foundations: creating a more prosperous nation'

¹⁷ RIBA (2014) 'Building a better Britain: a vision for the next Government'

¹⁸ DCLG (2010) 'English National Parks and the Broads UK Government Vision and Circular 2010'

UK energy efficiency standards for new homes - Background

In 2006 the Government introduced the Code for Sustainable Homes (CfSH) as a method for certifying the environmental and energy performance of new homes, helping reduce UK carbon emissions and meet a range of sustainability indicators. The CfSH was often included as a requirement of planning permission for new housing. At the same time the Government announced a zero carbon home policy, which aimed to ensure by 2016 every new home generated enough energy from renewable sources to cancel out their overall emission of greenhouse gases.

A written ministerial statement (WMS) on 25 March 2015 (in response to the Housing Standards Review) withdrew the Code for Sustainable Homes and consolidated some of its requirements into Building Regulations. The WMS confirmed that local planning authorities (LPAs) would not be able to apply policies in Local Plans which exceed the energy requirements of Building Regulations once amendments to the Planning and Energy Act 2008 came into force alongside the government's zero carbon homes policy, which was due in late 2016. The WMS meant many LPAs did not pursue policies to achieve improved energy performance standards as it was expected such policies would not be supported and would be overwritten by national policy in the near future.

In the July 2015 document 'Fixing the foundations'¹⁶ the Government withdrew commitment to the zero carbon homes policy, stating energy efficiency standards will be kept under review. This meant that whilst the opportunity to pursue more stringent energy performance standards was left open, significant uncertainty over whether this would change in the near future has remained.

On 15th March 2019, some four years after the WMS, the government clarified the position in National Planning Practice Guidance (Reference ID: 6-012-20190315):

"In their development plan policies, local planning authorities can set energy performance standards for new housing or the adaptation of buildings to provide dwellings, that are higher than the building regulations, but only up to the equivalent of Level 4 of the Code for Sustainable Homes."

- 3.1.5 After the winding up of the CfSH scheme and zero carbon homes policy planners are left with fewer tools to control the sustainability credentials of new development. The clear direction from Government is that local planning authorities are expected to set local requirements for a building's sustainability in a way consistent with nationally described standards and paying careful attention to development viability¹⁹.
- 3.1.6 National Planning Practice Guidance is now clear that local planning authorities can seek to require improved energy performance standards up to an equivalent of CfSH level 4. A research exercise was undertaken to investigate how this might be best achieved within the Dartmoor Local Plan²⁰.
- 3.1.7 In summary, the research highlights that:
- national policy allows for local plan policies to target a 20% emissions reduction over building regulations 2013 for residential and non-residential development;

¹⁹ DCLG (2014) National Planning Practice Guidance, Climate Change, Para 009'

²⁰ Enhabit (2019) 'Reducing Carbon Emissions in New Development: Policy Research and Recommendations'

- limits to Dartmoor’s development viability mean a 20% emissions reduction is unlikely to be achievable, but a smaller reduction of around 10% will be;
- there are further significant carbon savings to be made by reducing the ‘energy performance gap’, i.e. the trend that many buildings use far more energy (40% on average) than was modelled and forecast at design stage;
- measures to reduce the energy performance gap can include:
 - improved air tightness testing;
 - training on thermal bridging, airtightness, thermal bypass and building services for designers and contractors; and
 - improved on-site quality control procedures and management; and
- Passiv Haus and AECB certified buildings do not exhibit the energy performance gap.

3.1.8 It is important that the Authority’s leadership and influence is used to require more energy efficient development to occur, in accordance with the NPPF framework for sustainable development. By way of guidance it is also vitally important that this is done in a way which makes clear how energy efficient design is achieved by using the energy hierarchy and taking a fabric first approach. Even where factors such as embodied energy of materials and renewable energy systems can’t be directly controlled through policy.

Recommendations for Policy

3.1.9 In its November 2016 review of local plans in England the Town and Country Planning Association found that climate change mitigation has been de-prioritised as a significant local planning issue²¹. In view of the overwhelming and unequivocal evidence that human induced climate change is occurring the Dartmoor local plan should do all that it can to ensure the issue is given due prominence and all available means of contributing to national carbon reduction targets are taken.

3.1.10 The Authority should ensure the promotion of environmental sustainability is an important objective of the local plan. Climate change mitigation through energy efficient design is a key part of this and should be included in the Authority’s sustainability objectives and design policy. Following Enhabit’s research it is recommended that the Local Plan pursue a policy which seeks to reduce carbon emissions and reduce the performance gap by requiring:

- a circa 10% reduction in carbon emissions over Building Regulations Part L 2013, achieved through a fabric-first approach; and
- a number of measures intended to reduce the energy performance gap, including:
 - air tightness testing on all dwellings;
 - on-site training for air tightness, and avoiding thermal bypass and thermal bridging during the construction process
- flexibility allowing both these requirements to be bypassed where a development achieves Passiv Haus or AECB certification.

3.1.11 The Authority’s Design Guide includes sound advice on achieving energy efficient design in new development. The Design Guide promotes a fabric first approach, seeking to maximise the benefits of solar gain and thermal mass before installing ‘bolt-on’ enhancements such as on-site renewable energy generation equipment. This aspect should be retained.

3.1.12 2011 Analysis of hard-to-treat housing in England²² indicates the South West has the

²¹ Town and Country Planning Association (2016) *‘Planning for the Climate Challenge: understanding the performance of English local plans’*

²² Centre for Sustainable Energy (2011) *‘Analysis of hard-to-treat housing in England’*

highest proportion (8%) of properties which are of solid wall construction and off the gas network in England making them particularly difficult to make energy efficient. Given the high proportion of historic and listed buildings on Dartmoor it is highly likely this figure is considerably higher in the National Park.

- 3.1.13 The Authority's Design Guidance could be improved by signposting to general guidance on retrofitting to deliver energy efficiency enhancements (e.g. external/internal wall insulation, air source heat pumps, biomass heaters, flues, double/triple glazing, internal alterations, PV and solar thermal panels). Given the high proportion of listed and historic buildings in the National Park further guidance on acceptable approaches on these types of building could also be useful, although it would be a more complicated exercise and is already covered comprehensively by advice from Historic England (HE). HE recommends a whole building energy planning approach which weighs up energy saving measures against their impact on heritage significance, ensuring any building is studied carefully before assumptions about its efficiency are made. This approach aims to target effective, cost-efficient, low risk measures which have minimal impact on significance, including by improving building services and controls, changing the way a building is occupied, used and managed, and managing expectations to establish what is really necessary. Further guidance on the whole building energy planning approach is available²³, including detailed guidance on the upgrading of historic windows²⁴ and installation of draught-proofing²⁵ and secondary glazing²⁶.
- 3.1.14 As well as improving technical retrofitting guidance the Authority could do more to promote national and local energy saving initiatives and available funding sources through its website, including:
- Energy Companies Obligation (ECO) - a government energy efficiency scheme in Great Britain to help reduce carbon emissions and tackle fuel poverty
 - Renewable Heat Incentive (RHI) - a government financial incentive to promote the use of renewable heat
 - Cosy Devon – scheme provided by Devon County Council to home and business owners with energy saving advice as well as installation grants
 - Home energy check – a free online calculator to work out how to reduce energy bills
 - SEACS School and Community Energy Projects Toolkit – a toolkit for energy projects including factsheets on equipment and techniques
- 3.1.15 If the Authority pursued a Dartmoor Design Award, an environmental sustainability category would likely help promote sustainable construction as an important issue to address in achieving good design.

4 Residential Accessibility, Space Standards and Crime Prevention

4.1 Residential Accessibility

- 4.1.1 It is important for new development to deliver a built environment which is inclusive and can

²³ Historic England (2018) Energy Efficiency and Historic Buildings – <https://historicengland.org.uk/images-books/publications/eehb-how-to-improve-energy-efficiency/heaq094-how-to-improve-energy-efficiency/>

²⁴ Historic England (2017) *'Traditional Windows: their care, repair and upgrading'*

²⁵ Historic England (2016) *'Energy Efficiency and Historic Buildings: Draught-proofing windows and doors'*

²⁶ Historic England (2016) *'Energy Efficiency and Historic Buildings: Secondary glazing for windows'*

be accessed and used by everyone, accommodating the different ways in which people use it.

- 4.1.2 The NPPF requires that development accessibility is considered in applications through:
- Allocating development sites which are well connected to local services and public transport facilities
 - Ensuring safe and suitable access can be achieved for all people, particularly by:
 - Locating parking spaces and setting down points in close proximity to entrances;
 - Ensuring accessible design of approach routes
 - Clearly identifying entrances and ensuring they can be reached by a level or gently sloping approach and are well lit.
 - Requiring provision of clear and legible pedestrian routes and high quality public space
 - Ensuring provision of safe access and escape routes
- 4.1.3 The March 2015 Written Ministerial Statement introduced new optional Building Regulations standards for enhanced accessibility to new dwellings, Part M4(2) accessible and adaptable dwellings and Part M4(3) wheelchair user dwellings.
- 4.1.4 National Planning Practice Guidance requires that these additional requirements are only adopted where evidence justifies it, taking into consideration:
- The likely future need for housing for older and disabled people (including wheelchair user dwellings)
 - Size, location, type and quality of dwellings needed to meet specifically evidenced needs (for example retirement homes, sheltered homes or care homes)
 - The accessibility and adaptability of existing housing stock
 - How needs vary across different housing tenures
 - The overall impact on viability
- 4.1.5 NPPG states local plan policies for wheelchair accessible homes should be applied only to those dwellings where the local authority is responsible for allocating or nominating a person to live in that dwelling. As the National Park Authority is not the Housing Authority and do not fulfill this role it is not open to us to require provision of wheelchair accessible dwellings. The local plan should positively set out that the Authority will work with the District Housing Authorities to assess need for wheelchair accessible dwellings. This need will generally be identified through the Housing Register or a Housing Needs Assessment.
- 4.1.6 As of 2014 Dartmoor had a population of 33,888. In the period 2001 to 2014 the proportion of the population aged 65 and over has increased from 20% to 26%. Table 5 summarises the age profile of the National Park in the context of the county and country and clearly shows the National Park is experiencing an ageing population.

Table 2- Age profile indicators (Source: ONS)

Indicator	Dartmoor National Park	Devon	England
Percentage 65+	26%	24%	18%
Percentage 80+	7%	7%	5%
OAD	43	40	27
Median Age	50	46	40

OAD (old age dependency ratio) = population aged 65+ / population aged 15-64

- 4.1.7 A more detailed view of the National Park's age profile change between 2001 and 2014 is provided in Figure 1. The National Park has experienced a significant expansion in the 50+

age bracket and contraction in the under 40 age bracket. The most significant increases have been experienced in the 60 to 70 age bracket and reductions in the 30 to 40 age bracket.

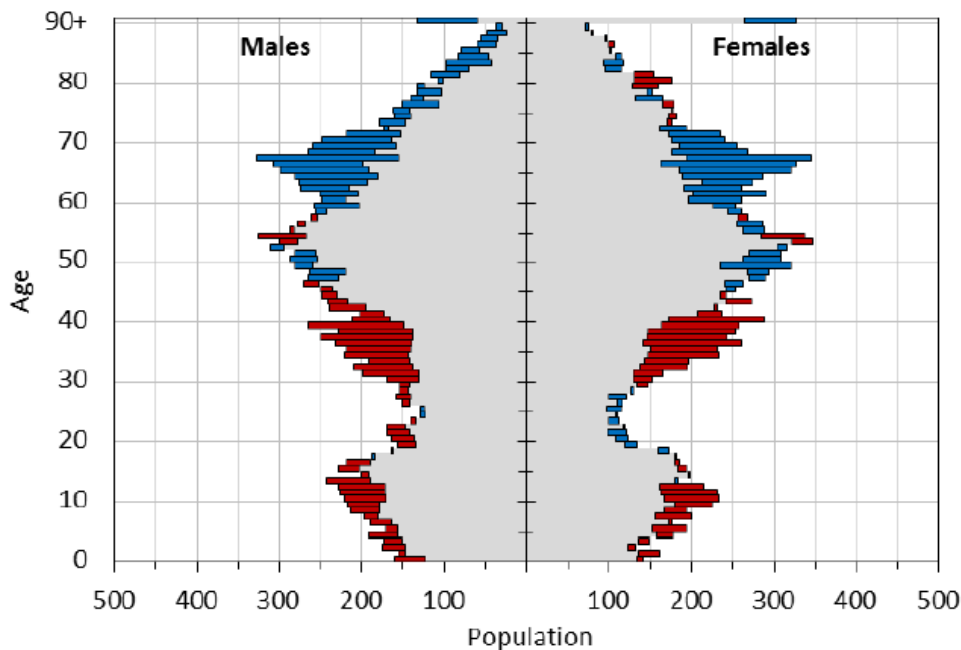


Figure 1 - Dartmoor National Park population age profile 2001 - 2014 (source: ONS)
Red indicates a reduction in the population between 2001 and 2014, blue an increase

- 4.1.8 Dartmoor's growing elderly population leads to an increased demand for older person's homes. For example in Chagford, Drewsteignton, Gidleigh and Throwleigh a need for 25 older person's homes was identified in 2010²⁷ and a 2013 Housing Needs Assessment suggested this need had continued. This led to a development of 15 specialist older persons homes coming forward in Chagford in 2014 (0524/14).
- 4.1.9 A survey on the housing aspirations of older people in Devon was completed by Devon Rural Housing Partnership in 2011²⁸. The report's relevant key findings include:
- Most older people want to stay within their existing community as they age
 - To allow older residents to remain in their home physical changes to properties are often needed
 - Local Planning Authorities need to consider amending planning policy which restricts open market housing development for older people in rural villages, which may force older residents to move away from their community support networks to find the easy and cheap to maintain new homes they need to live independently
- 4.1.10 Figure 2 shows the factors survey participants felt were key in influencing their next move. Accessibility to shops and leisure facilities, public transport and having level access were in the top 4 responses. Having an easy to maintain property was the most popular response.
- 4.1.11 4.5% of respondents identified a short term need and 12% of these (or 0.5% of survey respondents) identified a need for wheelchair accessible housing.

²⁷ Devon Rural Housing Partnership (2010) 'Parishes of Chagford, Drewsteignton, Gidleigh and Throwleigh older persons local housing needs report'

²⁸ Devon Rural Housing Partnership (2011) 'Housing aspirations of older people living in rural Devon'

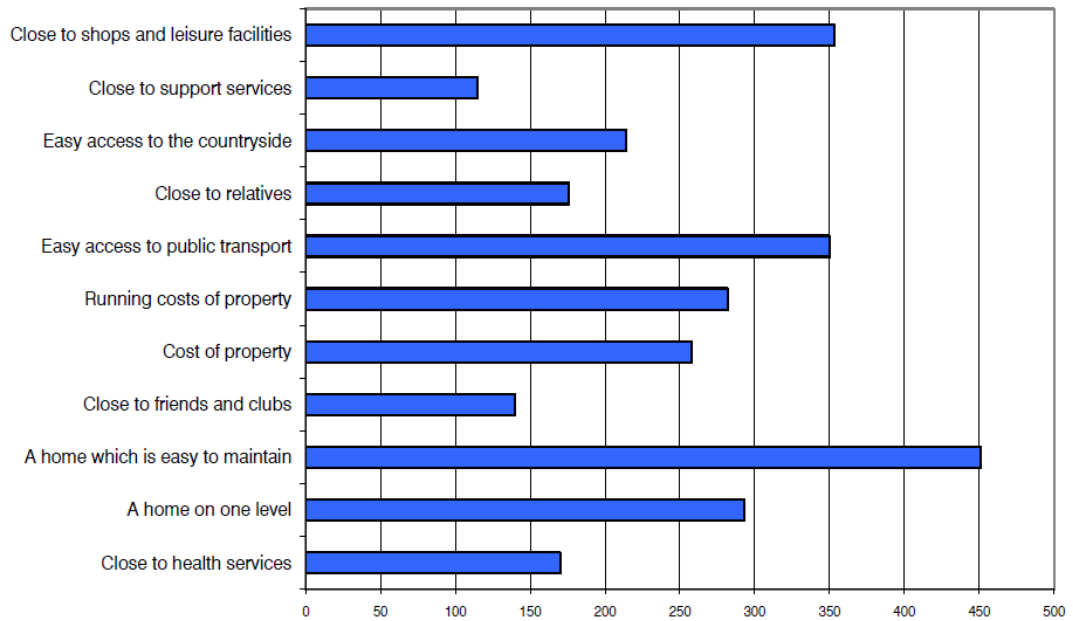


Figure 2 - Factors influencing older persons' next move²⁸

- 4.1.12 In the Chagford, Drewsteignton, Gidleigh and Throwleigh 2010 Housing Needs Assessment 90% of owner occupiers who stated they could only remain in their home if alterations, adaptations or additional support were provided identified a need for stair-lifts. Future-proofing housing design to allow for future installation of a stair-lift can only be required through Building Regulations Part M4(2) and M4(3). 1.9% of all survey respondents identified a need for wheelchair accessible dwellings.
- 4.1.13 The Strategic Housing Market Assessments for both Exeter²⁹ and Plymouth³⁰ Housing Market Areas (HMAs) project that there will be huge growth in the population aged 65 or over. The population of over 65s in the Exeter HMA is projected to increase by 44.4% between 2013 and 2033 and in Plymouth HMA by 41.3% between 2014 and 2034. The effects of these increases are predicted to be experienced particularly acutely in Dartmoor National Park which already has a higher proportion of its population over 65 than either of the wider HMAs. Demographic projections for the National Park predict the growth in the proportion of the population aged 65+ will increase at a similar rate to the housing market areas, 44.4% by 2035.
- 4.1.14 Demographic projections for the National Park also anticipate a significant growth in the age of the household representative; 65-74 (+15%), 75-84 (+66%) and 85+ (+141%), see Figure 3.
- 4.1.15 The result of this is that there is likely to be a significantly higher demand for specialist accommodation, extra care housing, adaptations and other age related care requirements into the future. The provision of housing with improved accessibility could therefore play a vitally important role in assisting ageing occupants to stay in their homes and communities longer as well as reducing future demand for specialist accommodation.

²⁹ Exeter Housing Market Area (2014) 'Strategic Housing Market Assessment'

³⁰ Plymouth Housing Market Area (2013) 'Strategic Housing Market Needs Assessment'

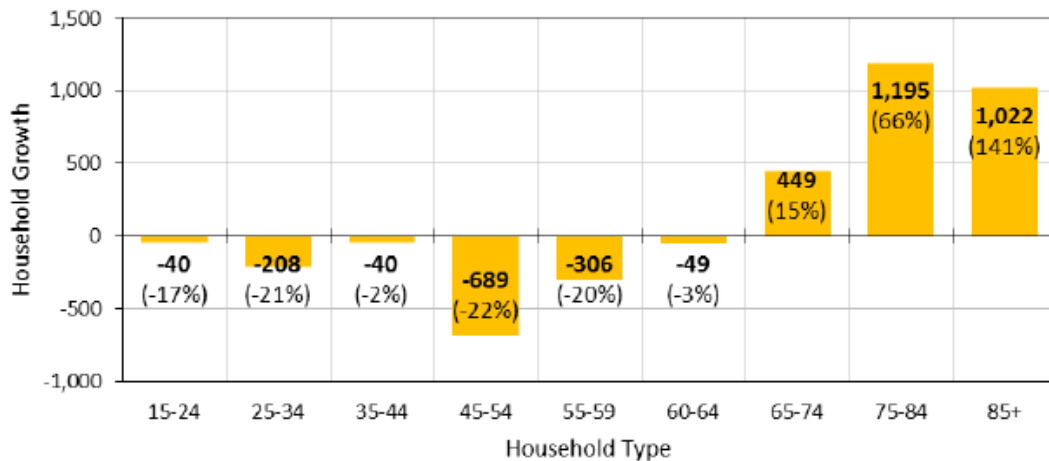


Figure 3 - Household growth by age of household representative 2015 - 2035³¹

- 4.1.16 The 2015 Index of Multiple Deprivation includes a category on indoor living environment, which is defined by the proportion of social and private homes that do not have central heating and the proportion which do not meet the Decent Homes Standard³². Although not a direct measure of accessibility the indicator provides a useful proxy for the overall standard of housing in the National Park and is an indicator of the extent to which modern accessibility standards are likely to be met.

Decent Homes Standard

This standard shows whether housing meets the current statutory minimum housing standard. To meet the standard properties must be in a reasonable state of repair, have reasonably modern facilities and provide a reasonable degree of thermal comfort.

- 4.1.17 The National Park scores particularly poorly with the indoor living environment of its Lower Super Output Areas (LSOAs) being ranked on average in the lowest 12.6% in England and 35% of the National Park's LSOAs being ranked in the lowest 3% in England. The high proportion of listed and traditional buildings is likely to be the primary cause of this. Whilst many older homes continue to be desirable and fetch above average prices, it is unlikely they will meet the accessibility needs of an ageing population.

Recommendations for policy

- 4.1.18 The huge projected growth of elderly persons in the National Park will bring with it unique demands on housing. Provision of accessible housing which can be easily adapted to meet common access requirements of older persons could make a valuable contribution to meeting elderly housing needs over the plan period. Simultaneously reducing the need for new development and allowing people to remain in their communities for longer.
- 4.1.1 It is recommended that the Authority seek that a proportion of new housing in the National Park is required to be accessible and adaptable and meets Building Regulations Part M4(2). The precise proportion should be informed by identified need and the impact the standard will have on overall development viability, this will be assessed further in the Housing Topic Paper. NPPG is clear that where Part M4(2) compliance cannot be achieved or is not viable,

³¹ Dartmoor National Park Authority (2016) 'Dartmoor National Park Demographic Forecasts'

³² Department for Communities and Local Government (2006) 'A Decent Home: Definition and guidance for implementation'

e.g. the difficulty of providing step free access in an area vulnerable to flooding, the requirement should not be applied and so policy requiring compliance should be worded flexibly.

- 4.1.2 The additional building regulations standards are not intended to impose additional information requirements at the application stage and it should be left to the Building Control Body to determine compliance. These standards are applied by appending a controlling condition to a planning decision.
- 4.1.3 Preamble to current policy DMD21 includes a desire for 50% of dwellings on sites of 5 units or more to meet Lifetime Homes Standards, subject to viability. This standard has not generally been pursued during the lifetime of the local plan, although this is not thought to have been due to viability concerns.

4.2 Residential Space Standards

- 4.2.1 The 25th March 2015 Written Ministerial Statement introduced a nationally described set of housing standards to rationalise the many differing existing standards into one national standard which complements building regulations.
- 4.2.2 The National Park Authority has not previously adopted residential space standards which applicants have been required to comply with. Indicative property sizes are however provided within the Affordable Housing SPD for affordable houses and agricultural workers dwellings. The Authority's indicative standards are compared with the nationally described standards in [Table 3](#). The national standards allow for slightly larger dwellings than the Authority's current indicative standards.

Table 3 – Standards for minimum gross internal floor areas (m²)

No. of bedrooms	No. bed spaces (persons)	National Standard			DNPA indicative
		1 storey dwellings	2 Storey dwellings	3 storey dwellings	All dwelling types
1 bed	1p	39	-	-	-
	2p	50	58	-	48 (1 storey)
2 bed	3p	61	70	-	-
	4p	70	79	-	62
3 bed	4p	74	84	90	-
	5p	86	93	99	85
	6p	95	102	108	-
4 bed	5p	90	97	103	-
	6p	99	106	112	95
	7p	108	115	121	-
	8p	117	124	130	-
5 bed	6p	103	110	116	-
	7p	112	119	125	-
	8p	121	128	134	-
6 bed	7p	116	123	129	-
	8p	125	132	138	-

- 4.2.3 National Planning Practice Guidance states local planning authorities should provide justification for requiring internal space policies, taking into account need and viability.
- 4.2.4 Overall it is considered the standards provide a trusted benchmark against which planners and applicants can assess development schemes. It is considered there are three reasons

which demonstrate a need to adopt minimum residential space standards in the National Park:

- As a clear and robust benchmark to use when assessing the quality of proposed accommodation
- To inform the size of affordable housing and agricultural workers dwellings to ensure there is an informed benchmark to strike the balance between quality of accommodation and future affordability
- To ensure residential accommodation proposed through conversions, particularly of traditional buildings, is adequately sized

4.2.5 The issue of Dartmoor's historic non-residential (particularly agricultural) buildings and the pressure they are under for conversion is discussed in the historic environment topic paper. As part of addressing this issue it is vitally important that Officers and applicants are able to assess whether traditional buildings are capable of being converted and quantitatively assess the quality of accommodation against a benchmark. Adopting national standards would greatly assist in this exercise.

Recommendations for Policy

4.2.6 For the reasons stated above it is considered adopting national minimum residential space standards is important in the National Park. Given that they represent an increase to current indicative standards the development viability impact of adopting these standards will need to be assessed in detail, this will be addressed in the Housing Topic Paper.

4.3 *Designing out Crime*

4.3.1 The NPPF includes the clear objective for local plans to aim to create safe and accessible environments where crime and disorder, and the fear of crime, do not undermine quality of life or community cohesion.

4.3.2 Section 17 of the Crime and Disorder Act 1990 requires all local authorities to exercise their functions with due regard to their likely effect on crime and disorder. NPPG recommends that local authorities agree with their police force how they will work effectively together on planning matters.

4.3.3 The Authority has agreed a protocol to consult the Designing out Crime Officer (DOCO) at Devon and Cornwall Police on the following types of planning applications:

- Major housing schemes of 10+ dwellings
- Major commercial offices, industrial, retail or leisure schemes
- New neighbourhood or district community facilities
- Relevant shop front improvements
- Proposals which include significant areas of open space/landscaping as part of a development, including linkage footpaths
- Proposals incorporating significant off street car parking provisions
- Proposals involving transport interchanges or other significant highway infrastructure
- Improvements such as cycle lanes and new or improved footpaths
- All applications for Class A3, A4 and A5 food and drink uses
- New or redeveloped schools/education premises
- Where the intended occupants are particularly vulnerable and require higher standards of security to ensure their personal safety; care homes & drug rehabilitation centres for example
- Gypsy and Traveller sites
- ATM's

- Large Solar Farms/Arrays
 - Any planning policy documents where community safety and security is relevant. This will include the Local Plan and Supplementary Planning Documents
- 4.3.4 Although the DOCO is not a statutory consultee and the Authority is not obliged to incorporate their comments, Officers do regularly require that applicants incorporate their requirements at the planning application stage.
- 4.3.5 The advice and recommendations provided by the DOCO are informed by the following principles and practices of Crime Prevention through Environmental Design (CPTED) and Secured by Design (SBD):
- **Access and movement:** places with well-defined and well used routes with spaces and entrances that provide for convenient movement without compromising security
 - **Structure:** places that are structured so that different uses do not cause conflict
 - **Surveillance:** places where all publicly accessible spaces are overlooked
 - **Ownership:** places that promote a sense of ownership, respect, territorial responsibility and community
 - **Physical protection:** places that include necessary, well-designed security features
 - **Activity:** places where the level of human activity is appropriate to the location and creates a reduced risk of crime and a sense of safety at all times
 - **Management and maintenance:** places that are designed with management and maintenance in mind, to discourage crime and disorder in the present and the future

Recommendations for Policy

- 4.3.6 As recommended in the design principles at 2.1.6, community safety should be an important consideration in the design of any new development and form a prominent component of the National Park's design principles. Continued engagement with the DOCO should ensure that these principles are incorporated into forthcoming proposals.