

# Local Plan Review: Infrastructure Delivery Plan (2021)

## Main Report

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# 1 Introduction

## Purpose of the Infrastructure Delivery Plan

Following the publication of the Stroud District Local Plan Review Draft for Consultation in November 2019, this Infrastructure Delivery Plan (IDP) forms part of the evidence base to support the Publication version<sup>1</sup> of the emerging Stroud District Local Plan Review.

This IDP draws together baseline information from stakeholders for transport, utilities, community and green infrastructure and services to understand the current the quality, capacity and any gaps or shortfalls of existing infrastructure provision within Stroud District.

The IDP then utilises the views of expert stakeholders, existing evidence and a range of benchmarks and standards to provide an assessment of the infrastructure that will be required to support the housing and employment growth set out in the emerging Local Plan Review. It will also seek to identify where new or improved infrastructure could help to unlock development sites.

The benchmarks and costs, derived from national, county and local levels, will be used to estimate the costs of infrastructure providing infrastructure to meet demands associated with housing and employment growth and the IDP will seek to identify potential funding solutions and calculate any shortfalls in funding.

It is recommended that the information within this IDP should inform any review of planning obligations and used to support specific negotiations in relation to s.106 and s.278 agreements.

The IDP aims to inform any cross-boundary strategic policies as set out within Paragraph 20 of the National Planning Policy Framework, which requires such

policy to set out an overall strategy for the pattern, scale and quality of development to make sufficient provision infrastructure types.

## Structure of this Report

This IDP is a ‘refresh’ and uses the existing IDPs (Arup, 2013<sup>2</sup> and 2014<sup>3</sup>) as a baseline. A summary of the infrastructure position for each sector as recorded in the 2014 IDP will be outlined within each chapter, as well as the following:

- Reporting of policy changes and strategy updates at national and local levels;
- Updates on the infrastructure projects delivered or progressed since the last IDP in 2014 (where available);
- An assessment of current infrastructure; and
- Consideration of the levels of growth proposed in the Development Plan Review and the future infrastructure requirements associated with this.

The report is structured as follows:

- **Section 2** sets out the national and local policy context for the Infrastructure Strategy;
- **Section 3** sets out the approach and methodology for the study;
- **Sections 4 to 14** provide a sector by sector summary of the infrastructure baseline and requirements to support development proposed by the Development Plan review. Each section provides an overview of the organisation responsible for planning and service delivery; and assessment of infrastructure needs and costs; and key infrastructure project.

<sup>1</sup> Under reg. 19 of The Town and Country Planning (Local Planning) (England) Regulations 2012.

<sup>2</sup> Arup (2013) Stroud Infrastructure Delivery Plan, Consultation Draft. Available: [https://www.stroud.gov.uk/media/2311/stroud\\_idp.pdf](https://www.stroud.gov.uk/media/2311/stroud_idp.pdf)

<sup>3</sup> Arup (2014) Stroud Infrastructure Delivery Plan, Refresh Version. Available: [https://www.stroud.gov.uk/media/2312/ps\\_e23.pdf](https://www.stroud.gov.uk/media/2312/ps_e23.pdf)

- **Section 15** outlines the infrastructure delivery strategy to support the sustainable growth set out in the Local Plan Review.

Within each sector, the infrastructure baseline and assessment against planned provision are reported on the basis of “Parish Clusters”. Further detail about parish clusters is included within the Policy Context section of this report.

## 2 Policy Context

### National Planning Policy

#### National Planning Policy Framework

Paragraph 20 of the National Planning Policy Framework (NPPF) requires that development plans should “contain strategic policies that set out an overall strategy for the pattern, scale and quality of development, and make sufficient provision for:

- Housing (including affordable housing), employment, retail, leisure and other commercial development;
- Infrastructure for transport, telecommunications, security, waste management, water supply, wastewater, flood risk and coastal change management, and the provision of minerals and energy (including heat);
- Community facilities (such as health, education and cultural infrastructure); and
- conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure, and planning measures to address climate change mitigation and adaptation.”

This IDP seeks to assess how, where and when infrastructure listed under paragraph 20 of the NPPF is required to meet the needs of the housing, employment/commercial, retail and leisure growth set out in the Local Plan Review.

#### Planning Practice Guidance

Planning Practice guidance sets out that the development strategy within a Local Plan should be justified by an evidence base informed by consultation with infrastructure providers and businesses to identify barriers to investment and delivery of growth.

### Local Planning Policy Context

#### Stroud District Local Plan (Adopted 2015)

The Stroud District Local Plan sets out the development strategy and delivery policies to support the sustainable growth of Stroud District up to 2031. The development strategy establishes broad principles about acceptable levels of development in the district’s towns and the countryside, whilst the policies seek to support the development strategy by managing and directing development, as well as specific site allocations, area designations, protections and planning controls.

The 2015 Local Plan supports the provision of the following, up to 2031:

- between 6,800 and 12,500 net jobs within new employment land allocations;
- further town centre and retail floorspace; and
- at least 11,400 new homes to respond to the District’s housing need.

Key objectives for the plan include: creating accessible communities; supporting the local economy and delivering jobs; improving services in town centres and the hinterlands; delivering improvements to transport infrastructure; responding to climate change; and protecting biodiversity and the district’s unique landscape.

A rationale was applied within the Local Plan of concentrating most development at a series of strategic locations, where housing, jobs and necessary infrastructure can be coordinated and delivered together in a timely manner.

Core Policy CP6 sets out the strategy for infrastructure and developer contributions. This establishes principles for ensuring necessary infrastructure is put in place to mitigate development, and that developers contribute towards additional infrastructure or improved community services and facilities either by providing new infrastructure onsite, or by providing financial contributions for public sector delivery.

## Stroud District Local Plan Review (Pre-submission Draft Plan, May 2021)

Government regulations require Local Planning Authorities to update their Local Plans every five years. As the Stroud District Local Plan was adopted in November 2015, a new strategy is being developed to ensure that there are enough homes, jobs, services and infrastructure to support sustainable growth in the district.

Consultation was undertaken on a Draft<sup>4</sup> version of the Local Plan Review between November 2019 and January 2020 and again between October and December 2020. Following consideration of feedback from these consultations, the Council prepared a Pre-submission Draft Plan<sup>5</sup> which was approved by Full Council in April 2021. This version of the plan sets out:

- A housing requirement of approximately 12,600 new dwellings to 2040; and
- A requirement for up to 60.3ha of employment land up to 2040

Taking account of committed development, the Pre-submission version of the Local Plan seeks to allocate land for approximately 9,065 new dwellings on eight strategic development sites and within or adjacent to 14 existing settlements. The Pre-submission Local Plan also identifies 79ha of employment land across eight strategic sites when considering potential or committed losses of employment land.

The Pre-submission Local Plan also includes consideration of a site which is intended to make a contribution to meeting the unmet housing needs of Gloucester City for the Plan period by safeguarding for growth at Whaddon, which is in the north of Stroud District.

The distribution of growth from the Pre-submission Local Plan Review Core Policy CP2 is set out within Table 1 and Table 2. The table below outlines the strategic development sites proposed for allocation. These include urban extensions to existing settlements and the creation of new settlements using garden village principles. Land at Whaddon, highlighted in red, is safeguarded

to meet the future housing needs of Gloucester City should it be required and provided it is consistent with the approved strategy of the Joint Core Strategy Review.

Table 1 Distribution of growth – Strategic development sites

| Location                   | Employment (up to 2040) | Housing (up to 2040)        |
|----------------------------|-------------------------|-----------------------------|
| Cam North West             |                         | 900 dwellings               |
| Cam North East Extension   |                         | 180 dwellings               |
| South of Hardwicke         |                         | 1,350 dwellings             |
| Hunts Grove Extension      |                         | 750 dwellings               |
| Javelin Park               | 27ha                    |                             |
| Quedgeley East Extension   | 5ha                     |                             |
| Renishaw New Mills         | 10ha                    |                             |
| Sharpness Docks            | 7ha                     | 300 dwellings               |
| Sharpness                  | 10ha                    | 2,400 dwellings             |
| Stonehouse North West      | 5ha                     | 700 dwellings               |
| Stonehouse-Eco Park M5 J13 | 10ha                    |                             |
| Wisloe                     | 5ha                     | 1,500 dwellings             |
| Land at Whaddon            |                         | 3,000 dwellings (Glos City) |

Table 2 outlines the proposed levels of housing growth within or adjacent to 14 existing settlements across Stroud District. These are referred to as local development sites and don't include the strategic levels of growth outlined above.

Table 2 Distribution of growth – Local development sites

| Location            | Housing (up to 2040) |
|---------------------|----------------------|
| Berkeley            | 170 dwellings        |
| Brimscombe & Thrupp | 190 dwellings        |
| Dursley             | 10 dwellings         |

<sup>4</sup> Under reg. 18 of The Town and Country Planning (Local Planning) (England) Regulations 2012.

<sup>5</sup> Under reg. 19 of the Town and Country Planning (Local Planning) (England) Regulations 2012.

| Location            | Housing (up to 2040) |
|---------------------|----------------------|
| Frampton-on-Severn  | 30 dwellings         |
| Hardwicke           | 10 dwellings         |
| Kingswood           | 50 dwellings         |
| Leonard Stanley     | 40 dwellings         |
| Minchinhampton      | 80 dwellings         |
| Nailsworth          | 90 dwellings         |
| Newtown & Sharpness | 70 dwellings         |
| Painswick           | 20 dwellings         |
| Stonehouse          | 10 dwellings         |
| Stroud              | 165 dwellings        |
| Whitminster         | 50 dwellings         |

As set out above, the Pre-submission Local Plan utilises “Parish clusters”, which originate from the 2015 current Local Plan. These clusters group parishes that share some geographic and functional similarities and the Local Plan Review reports on this basis, outlining the particular needs and opportunities for these eight different parts of the District. The parish clusters are:

- The Stroud Valleys
- Cam & Dursley
- The Berkeley Cluster
- The Wotton Cluster
- The Stonehouse Cluster
- The Gloucester Fringe
- The Severn Vale
- The Cotswold Cluster

As with the 2015 Local Plan, the Local Plan Review includes Core Policies and Delivery Policies to guide and support the sustainable growth of the district. These policies outline the following principles of relevance to infrastructure provision and delivery and therefore to this IDP:

- Policy CP1 sets out how the District will become Carbon Neutral by 2030 with an emphasis on development that supports the most sustainable travel modes, maximises green infrastructure and is constructed to reduce energy

demand, utilising low or zero carbon energy generation and constructed to the highest energy efficiency standards.

- Policy CP4 outlines the Spatial Vision for Stroud. Development proposals will integrate into the neighbourhood in terms of accessibility, supporting services, protecting biodiversity and cultural assets, reduce reliance on the car and provide attractive public and private amenity spaces.
- Policy CP5 sets out the principles for strategic development sites, including making the sites accessible to key services and community facilities, providing sustainable transport infrastructure, delivering landscaping and minimising resource consumption.
- Policy CP6 is retained from the 2015 Local Plan as set out above and updated to reflect the adoption of Community Infrastructure Levy..
- Policy CP7 requires that housing development contributes to the provision of sustainable and inclusive communities by including community facilities.
- Policy CP8 supports housing development that enables accessibility by active travel and public transport to services and employment, or development that contributes towards provision of new sustainable transport infrastructure. Housing development should provide sufficient landscaping, community facilities appropriate to the site and renewable or low carbon energy sources.
- Policy CP11 seeks to ensure that employment development is supported by infrastructure helps to cut carbon dioxide emissions and adapt to climate change.
- Policy CP12 seeks to protect existing District centres and provide shops and services within new settlements and urban extensions.
- Policy CP13 seeks to improve the existing transport infrastructure network and promote the delivery of sustainable travel measures and reduce demand for the private car.



- Policy CP14 promotes sustainable development measures including provision of utilities, flood risk management, sustainable transport measures and the provision and protection of green infrastructure.
- A range of Delivery Policies seek to protect existing and provide new open spaces, sports facilities, community uses, retail uses, sustainable transport options and renewable or low carbon energy generation.

Submission of the Local Plan Review to the Planning Inspectorate (PINS) is programmed for September 2021, with examination proposed for Autumn 2021 and adoption of the new Local Plan by the end of 2022.

## 3 Approach and Methodology

### Approach

The IDP draws together baseline information from infrastructure and service providers for transport, flood risk, utilities and waste management, community facilities such as health, education and culture, and green infrastructure that will be required to support the housing and employment growth set out in the Local Plan Review.

The IDP will also identify gaps in infrastructure provision and estimate infrastructure costs using benchmark standards, as well as identifying secured and potential funding and calculate any shortfalls in funding.

In accordance with the NPPF (paragraph 20) the following infrastructure topics are considered within this IDP:

- Transport and Highways
- Education
- Open Space and Green Infrastructure
- Community Facilities
- Utilities
- Waste
- Flood Risk and Drainage
- Health and Social care
- Sport and Recreation
- Emergency Services
- Communications

A list of the literature that has been used to develop the infrastructure baseline is outlined within each chapter, along with any articles or websites used to identify project delivery.

### Methodology

This IDP utilises a similar method to that which was employed during the infrastructure delivery studies undertaken in 2013 and 2014 to support the 2015 version of the Stroud Local Plan. This IDP has been undertaken in five broad stages:

**Stage 1 – Define Development Scenarios:** This stage establishes the housing and employment requirements as defined by the government’s ‘standard method’ and confirmed by the Gloucestershire Local Housing Needs Assessment. It defines development scenarios to be tested, including any ‘reserve’ sites and involved confirmation of the geographies for reporting.

**Stage 2 – Undertake Baseline Review:** This Stage involves a desk-based review of the relevant published evidence base documents from the Stroud Local Plan Review as well as those documents produced by infrastructure and service providers. Many infrastructure and service providers prepare estate strategies, forward plans and annual reports and undertake business planning exercises to help understand the adequacy of their existing assets and determine future infrastructure requirements. Stage 2 of the IDP is to undertake a desk-based review of the various strategies and plans of each of the service providers. This process has not started from scratch for this IDP and the previous iterations of the IDP are also used as a baseline.

**Stage 3 – Undertake Consultation with Infrastructure Providers:** To confirm the established baseline and understand if this remains relevant and a reflection of the current situation, including addressing any gaps in knowledge, a consultation is undertaken with infrastructure providers. This consultation seeks to identify any planned schemes, reviews the known or predicted implications of the proposed growth and tests infrastructure requirements to support delivery of proposed site allocations. Where possible, benchmarks are requested to enable an assessment of demands and costs and potential funding sources are discussed.

**Stage 4 – Assessment of Infrastructure Needs and Deficits:** Once the infrastructure baseline has been established through desk-based review and confirmed via stakeholder discussions, the planned infrastructure required and

gaps in infrastructure provision for each site allocation and settlement-based growth is analysed using the most up-to-date housing and employment growth trajectory and locally or nationally derived standards in provision, alongside known information on costs, gathered as part of the previous stage. This output forms an ‘IDP Calculator’ of which, extracts are presented throughout this report.

**Stage 5 – Reporting of Infrastructure Requirements:** Utilising the data collected to date, the planned provision and scheme identification based on is outlined alongside a review of existing and emerging delivery mechanisms. A delivery strategy is then concluded upon in collaboration with infrastructure providers and Stroud District Council. This considers potential risks to the delivery of the growth proposed in the Local Plan Review, ways to assist in delivering projects, potential funding shortfalls and funding sources such as planning obligations, central government and ad-hoc bidding opportunities.

## 4 Infrastructure Assessment: Transport and Highways

### Responsibility for delivery

The following bodies are responsible for governing transport assets and for delivering road and rail schemes in Stroud:

| Service Provider                      | Responsibility   |
|---------------------------------------|--|
| <b>Highways England</b>               | Highways England is responsible for managing the Strategic Road Network (SRN), which includes the Motorway and Trunk Road network. In Stroud District, the SRN includes the M5 motorway between South Gloucestershire and Tewkesbury Borough, including Junctions 12 and 13. Whilst the A417 is located in Tewkesbury Borough and Cotswold District, it is in close proximity to Stroud District and has implications on accessibility and movement within the district. |
| <b>Gloucestershire County Council</b> | Gloucestershire County Council (GCC) is the local highways authority responsible for the maintaining and enhancing the local road network in Stroud District.  |
| <b>Network Rail</b>                   | Network Rail are responsible for the maintenance and enhancement of rail infrastructure. Network Rail is also the landlord of virtually all stations on the network, although all the stations in Gloucestershire are leased to train operators. The three train stations in Stroud are Stroud, Stonehouse and Cam and Dursley.  |
| <b>Train Operators</b>                | Within Stroud District, First Great Western operate rail services on the Swindon to Gloucester rail line, with stops at Stroud and Stonehouse; and the Bristol to Gloucester route with a stop at Cam & Dursley. First Great Western is responsible for the management and improvement of these stations.  |
| <b>Bus Operators</b>                  | The main bus service operator for Gloucestershire is Stagecoach West.  |

### Overview of progress since the 2016 IDP

#### Literature, Policy and Strategy Changes

The Transport Chapter of the 2014 IDP set out the following key attributes to the transport network in Stroud: high levels of commuting out to Gloucester, Bristol and Bath; dominance of private car-based travel given the rural nature of large parts of the district and relatively good accessibility via rail stations at Stroud, Stonehouse and Cam and Dursley.

The vision for the area is set out in the LTP3 for the Stroud Area Transport Strategy and was centred on creating viable and self-sufficient communities, focussed around the key market towns in the district.

The IDP identified 14 major pinch-points on the road network in and around the district. This included Junctions 12, 13 and 14 of the M5 motorway, which were identified as approaching capacity by the end of the Plan period. Other constraints on the network include the Cross Keys Roundabout, the A38 Cole Avenue, A430 Bristol Road and the A419 / Old Ends Lane.

The major transport projects identified included:

- Birmingham to Exeter Route Strategy for M5 (provision of driver information signage);
- redoubling of the Swindon to Kemble railway line;
- development of the Gloucester to Stroud Quality Bus Corridor;
- Public transport Smart Card ticketing; and
- Bus Service Real Time Passenger Information (RTPI) expansion and electronic bus priority.

A summary of the transport challenges for each of the Strategic Site Allocations is included below:

**North East Cam:** is located in close proximity to the M5 and could result in issues of capacity on the motorway. It benefits from close proximity to Cam and

Dursley train station. It was considered that the allocation could support the creation of a new Park and Ride and an expansion to the railway station car park.

Strategic bus routes were required to connect the development with Dursley, Stroud and Gloucester. Development was seen as a catalyst to support the completion of the Cam and Dursley Greenway cycling and pedestrian route.

**Sharpness:** The IDP sets out that the site was geographically separate from the rest of the district. Highway improvements were required to enable access, including the creation of an access from Oldminster Road and reinstating the bridge crossing. Improvements to bus connectivity were seen as being required.

**West of Stonehouse:** The site directly impacts on the A419, which is the principal route between the M5 Junction 13 and the centre of Stroud. A GCC Highways major scheme was identified in the 2014 IDP for A419 corridor improvements between M5 Junction 13 and Stroud town centre (estimated capital cost of £3.5m).

The site has good connectivity via rail at Stonehouse, although improvements to enhance the station's role as a public transport interchange were identified as part of LTP3.

**Hunt's Grove & Quedgeley East:** The IDP set out that the following road infrastructure improvements were required: junction layout and signalisation changes at M5 Junction 12; B4008/A38 Cross Keys Roundabout signalisation; and A38 Waterwells roundabout capacity improvements.

The IDP identified the potential for the provision of a new railway station south of Gloucester at Hunt's Grove, which was included in the LTP3. The estimated capital cost of the project is £15.7m.

### Changes since 2014 IDP: Overarching Documents

**Revised National Planning Policy Framework (2019):** The revised NPPF states that transport issues should be considered from the outset of plan-making.

This is to: manage impacts upon transport networks; realise opportunities from existing and proposed transport infrastructure; promote walking, cycling and public transport; minimise or mitigate environmental impacts of traffic and infrastructure; and to encourage embedding sustainable movement into scheme design.

Growth should be within locations which are, or can be, made sustainable.

Planning policies should support an appropriate mix of uses and require development to be located in such a way to minimise the number and length of journeys residents will need to make to access work and services. Cooperation with local highways authorities and other infrastructure and services providers is advocated. Transport and active travel infrastructure should be identified and, where possible, provided for within the plan.

**Local Transport Plan 2020-2041 (March 2021)<sup>6</sup>:** The Local Transport Plan (LTP), produced by GCC, sets out the strategy for transport in Gloucestershire to 2041. This builds on the previous version of the LTP which covered a period from 2011 to 2026 to reflect changes in national guidance and new local priorities.

Gloucestershire's LTP aims to set out the policies needed to deliver a transport system able to accommodate current and future economic and housing growth.

The LTP is split into two parts: the first, is a visioning document, 'Shaping the Way to 2041'. At a County-level, there have been successful efforts to secure funding for strategic road schemes to increase capacity, however, the LTP outlines a number of other approaches to reduce congestion and provide cleaner transport. These include:

- Better integration of all modes of transport to increase connectivity and encourage modal shift.
- Implementing Self-Monitoring Analysis and Report Technology (SMART) to manage traffic and maintain facilities and infrastructure.

<sup>6</sup> Gloucestershire County Council (2019) Gloucestershire Local Transport Plan. Available: <https://www.gloucestershire.gov.uk/media/2105626/ltp-policy-document-final-v131.pdf>

- Accommodate new vehicle technology including automated and electric vehicles and supporting infrastructure.
- Encourage shared mobility, such as car clubs and Carshare Gloucestershire.

The main body of the LTP, ‘Overarching Strategy’ sets out key transport policies for each mode of transport and place-based strategies for addressing the challenges of sustainable economic growth whilst reducing carbon emissions and improving the health and wellbeing of people in Gloucestershire.

**Stroud District Local Plan Review: Pre-submission Draft Plan (2021)**<sup>7</sup>: The Stroud Draft Local Plan has a strategic objective to promote alternatives to the use of the private car and seeks to reduce CO2 emissions by using new technologies, active travel and encourage smart travel choices. The Plan looks to work towards a more integrated transport system to improve access to local goods and services.

Key challenges identified in the Draft Plan include major transport works identified for the M5 Junctions 12, 13 and 14, together with improvements along the A419 and A38 corridors. Improvements to the public transport network included increasing rail and bus services along main transport corridors and improvements to interchanges and the Cam & Dursley rail station.

The Local Plan continues to support the provision of an additional rail station on the Bristol to Birmingham main line. Sites at Bristol Road, Stonehouse and Hunts Grove, Haresfield are safeguarded in the current Local Plan for this purpose.

**Stroud Sustainable Transport Strategy (2019)**<sup>8</sup>: Outlines potential sustainable solutions to tackle transport-based issues such as congestion, accessibility, air quality, public health and safety, whilst responding to the growth set out in the Local Plan Review.

<sup>7</sup> Stroud District Council (2021) Pre-submission Draft Plan. Available: <https://www.stroud.gov.uk/environment/planning-and-building-control/planning-strategy/stroud-district-local-plan-review>

The Strategy outlines the challenges and opportunities to be addressed through sustainable transport, including: reducing reliance on the car; improving access to jobs and reducing out-commuting; supporting an aging population; and improving public transport and cycle networks. The Strategy has the following vision to: *“Enable mobility for all, prioritising sustainable and low carbon modes of transport, allowing healthy and prosperous communities and economy to thrive, whilst continuing to be an environmentally responsible District.”*

The Strategy outlines policy interventions, behavioural interventions and projects and schemes based on modes of travel and travel corridors. The schemes identified within the Strategy are outlined within the Planned Provision and Scheme Identification based on revised Housing and Employment Needs.

### Changes since 2014 IDP: Highways and public transport

**Department for Transport Road Investment Strategy 2: 2020–2025**<sup>9</sup>: The Road Investment Strategy (RIS) outlines the vision for the Strategic Road Network across England and sets out planned investment to be undertaken by the Department of Transport and implemented by Highways England. The RIS outlines £27.4bn worth of investment across the period 2020 to 2025. This is the second RIS following reforms in funding and management of the Strategic Road Network in 2014.

The first RIS (2015-2020) did not specifically identify any projects within Stroud District, but did identify a scheme to replace a section of the A417 approximately 3km to the north of the district at Birdlip. This project is known as the Missing Link and seeks to remove congestion caused by a dangerous junction at Air Balloon Roundabout.

The A417 scheme continued to be identified as a project within the RIS 2. A further scheme, again outside Stroud, but with the potential to enhance connectivity into the district, is the M5 Junction 10 and Link Road scheme. This

<sup>8</sup> Aecom, on behalf of Stroud District Council (2019) Stroud Sustainable Transport Strategy. Available: [https://www.stroud.gov.uk/info/Stroud\\_Sustainable\\_Transport\\_Strategy.pdf](https://www.stroud.gov.uk/info/Stroud_Sustainable_Transport_Strategy.pdf)

<sup>9</sup> Highways England (2020) Road Investment Strategy 2. Available: <https://www.gov.uk/government/publications/road-investment-strategy-2-ris2-2020-to-2025>

is proposed to be funded through the Housing Infrastructure Fund and is located approximately 10km to the north of the district and seeks to improve connectivity to Cheltenham and the surrounding area.

**The Birmingham to Exeter M5 Route Strategy (March 2017)<sup>10</sup>:** The Route Strategy provides a high-level view of the current performance of the 295-mile SRN between Birmingham and Exeter. The Strategy also outlines issues identified by stakeholders that affect the network.

The Strategy identifies the M5 north of junctions 15 to 9 as a study area on the SRN which requires further investigation due to issues raised by stakeholders and problems identified by Highways England.

The levels of congestion in the study area, particularly at Junctions 9, 10, 11, 11a, 12 and 14 are expected to increase in the future. Currently, at several of these junctions' queues are significant raising safety concerns. Concerns are raised that the level of congestion created could constrain Stroud's economic growth and lead to an increase in traffic related incidents.

**Local Transport Plan Draft for Consultation 2015-2041 Policy Document 4 - Highways:** The LTP outlines that businesses within Gloucestershire depend upon a good quality highway network to ensure economic prosperity. The LTP contains policies relating to highways including; Gloucestershire's Highway Network, Highway Network Resilience, Highway Maintenance, Road Safety and On-Street Car Parking. Expected outcomes relating to Highways as a result of the LTP include reduced transport derived carbon emission and a business community which benefits from connectivity with local, national and international markets.

The LTP outlines that public and community transport services play a key role in enabling communities to function and in Gloucestershire's ambitions to reduce greenhouse gas emissions. The LTP contains policies relating to public and community transport including: Gloucestershire's Bus Network, Improving the quality of road based public transport, Bus Priority, Coach Travel,

Community Transport, Transport Interchange Hubs and Communicating Travel Information. Expected outcomes relating to public and community transport services as a result of the LTP include a reduction in solo car use and an integrated transport network which provides individuals with the confidence to consider all travel choices.

The LTP outlines that the County's freight needs can gain much from the smarter use of the existing network. The LTP contains policies relating to the Gloucestershire's road freight network including: freight journey routing information; driver facilities; driving better practice; and managing domestic deliveries in urban or sensitive locations. Expected outcomes relating to freight include heavy goods vehicle movements being balanced between the needs of business and local communities and making Gloucestershire a place to do business and attract investment.

### Changes since 2014 IDP: Rail

**Gloucestershire Rail Investment Strategy (March 2020)<sup>11</sup>:** Rail travel in Gloucestershire has almost trebled over the past 20 years to reach the current 6 million journeys annually. The stations with highest patronage are Cheltenham (42% of county total) and Gloucester (30% of county total), followed by Stroud. The Strategy estimates that only about 54% of residents have ready access to a train station, the vast majority of which are urban residents.

There have been no new stations built in Stroud since Cam and Dursley opened in 1994.

The Strategy identifies a number of key corridors with a set of potential improvements which could be made to each of them:

- Bristol-Gloucestershire-Birmingham
- South Wales-Gloucestershire-Birmingham
- South Cotswold Line - Gloucestershire-Swindon-London Paddington

<sup>10</sup> Highways England (2017) Birmingham to Exeter Route Strategy. Available: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/600848/Birmingham\\_to\\_Exeter\\_Final4.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/600848/Birmingham_to_Exeter_Final4.pdf)

<sup>11</sup> Gloucestershire County Council & SLC Rail (2020) Gloucestershire Rail Investment Strategy. Available: <https://www.gloucestershire.gov.uk/media/2096940/gloucestershire-rail-strategy.pdf>



- Sharpness and Severn Bridge
- North Cotswold Line - Hereford-Worcester-Moreton-In-Marsh-Oxford-London Paddington
- A46 Corridor East Midlands to South West Midlands
- Cheltenham Station to Cheltenham Racecourse

Whilst many of these proposed alterations are changes to rail services which do not require infrastructure works, some of the proposals include significant infrastructure developments. These proposals are outlined in the section Planned Provision and Scheme Identification.

#### **Local Transport Plan Draft for Consultation 2015-2041 Policy Document 5**

**- Rail:** The LTP outlines that Gloucestershire’s vision for rail is more frequent, faster passenger services accessed via modern station facilities that are connected to the rest of the country. The LTP contains policies relating to rail including: rail infrastructure improvements, service capacity improvements and station improvements. Expected outcomes relating to Gloucestershire’s rail network include greater economic activity and a viable passenger network.

**The Western Route Study (WRS) (August 2015)<sup>12</sup>:** The WRS sets out the strategic vision for the future of the south west’s rail network over 30 years. Stroud train station is identified as part of a ‘National Stations Improvement Programme’ in the baseline review undertaken for the WRS.

#### **Changes since 2014 IDP: Active travel**

#### **Local Transport Plan Draft for Consultation 2015-2041 Policy Document 2**

**– Cycle and Policy Document 6 - Walk:** The LTP outlines that a connected and inclusive cycling network would help to address economic, social, environmental and health objectives identified in the Plan. The LTP contains policies relating to the county’s cycle network including Gloucestershire’s cycle

network, cycle asset management and active travel: safety, awareness and confidence. Expected outcomes relating to Gloucestershire’s cycle network as a result of the LTP include a healthy more active population and increased number of cycling trips.

The LTP outlines that public footpaths and rights of way are important links between villages, linking outlying villages and larger urban areas to wider public transport networks. The LTP contains policies relating to the county’s walking network including Gloucestershire’s pedestrian network, rights of way, pedestrian asset management and pedestrian safety. Expected outcomes relating to Gloucestershire’s walking network as a result of the LTP include increased footfall in retail areas, increased number of walking trips and a healthy more active population.

### **Scheme and Project Delivery**

#### **Schemes since 2014: Highways and Public Transport**

**M5 Driver Information Signage (2014-2015)<sup>13</sup>:** Highways England delivered the £3.2m scheme to carry out works to install additional roadside signs to improve driver information available between Junctions 11 and 12 southbound on the M5. The scheme delivered seven new variable message signs as part of the Government’s ‘*Pinch Point Programme*’, which is designed to deliver smaller scale improvements to the strategic road network that will help to stimulate growth in the local economy, relieve congestion and improve safety.

**M5 Junction 13 northbound on-slip improvements:** Works carried out by GCC to improve Junction 13 of the M5 in response to the development at West of Stonehouse, allocated in the 2015 Local Plan. Improvements were secured through application S.14/0810/OUT.

<sup>12</sup> Network Rail (2015) Western Route Study – Long Term Planning Process. Available: <https://cdn.networkrail.co.uk/wp-content/uploads/2016/11/Western-Route-Study-Final-1.pdf>

<sup>13</sup> Highways Agency (2014) M5 between Junction 11 and 12 Gloucester. Available: <https://www.gov.uk/government/news/32-million-improvements-start-on-m5-between-junction-11-and-12-gloucester>



**Cross Keys Roundabout Improvements<sup>14</sup>:** Funded by a £2.7m grant from the DfT's National Productivity Investment Fund, this scheme delivered widening of approach lanes and improvements to conditions for buses and cyclists. The improvements were completed in Autumn 2019.

**A419 Junction improvements:** A package of junction improvements<sup>15</sup> undertaken by GCC to improve Chipmans Platt, Oldends Lane and Downton and Horsetrough Roundabouts on the A419. Works include increasing the number of lanes, carriageway widening, upgrades to signals and installations of crossings. Works were completed in Spring 2020.

**Haresfield Lane Realignment:** The realignment of the section of Haresfield Lane within Hunts Grove, to connect with Phase 3 of the Hunts Grove development, consented as part of application S.13/2774/FUL.

### Schemes since 2014: Rail

**Swindon to Kemble line redoubling works (2014)<sup>16</sup>:** Network Rail delivered the £45m line upgrade between Swindon and Kemble to deliver greater capacity on the rail network, reduced journey times and a better experience for passengers.

Redoubling the 12.5 mile stretch of track aims to help trains travel more efficiently in both directions between Kemble into North Wiltshire. The infrastructure upgrade included the reinstatement of the second railway line, improvements to earthworks to accommodate the new track, and the installation of new signalling equipment to control the movement of trains.

### Schemes since 2014: Active Travel

**Thinktravel<sup>17</sup>:** Gloucestershire's 'Thinktravel' initiative aims to inform and educate people to have greater consideration of active travel and public transport

options. The overall aim of the initiative is to encourage more sustainable travel in the future.

**Local Government Sustainable Transport Fund (LTSF) (2012-2017)<sup>18</sup>:** The LTSF delivered a range of projects between 2012-2017 in education, job centres, businesses and communities to encourage cycling provision in the county. This included the following schemes<sup>19</sup>:

- Bike IT Plus (Schools 2012-2016)– Encouragement scheme in school that aimed for a 5% reduction in pupils travelling to school by car;
- Journeys to Jobs (2016-2017) – 400 people benefitted from bus and bike vouchers; and
- Business Engagement (2016-2017) – A survey of workplaces in the county found that 50% of staff would be encouraged to cycle to work if measures were implemented to make it easier.

## Assessment of Current Infrastructure Provision

### Overview

Car travel remains the most popular form of travel within Stroud District, with 83% of inbound/outbound trips occurring by private motorcar (LTP, 2021) and 86% of people own at least one car (Sustainable Transport Strategy).

The M5 motorway runs north to south through Stroud District connecting with South Gloucestershire and the city of Gloucester. There are two motorway junctions within the District; J12 and J13. The northern part of the district is close to the A417 trunk road (which falls within Cotswold District and

<sup>14</sup> GCC (2019) Cross Keys Roundabout Improvements. Available:

<https://www.gloucestershire.gov.uk/highways/major-projects-list/cross-keys-roundabout-improvements/>

<sup>15</sup> GCC (2019) A419 Highway Improvements. Available:

<https://www.gloucestershire.gov.uk/highways/major-projects-list/a419-highway-improvements/>

<sup>16</sup> RTM (2014) Swindon to Kemble line re-doubling works. Available:

<http://www.railtechnologymagazine.com/Rail-News/nr-completes-45m-swindon-to-kemble-line-re-doubling-works->

<sup>17</sup> ThinkTravel (2020) ThinkTravel Website. Available: <https://www.thinktravel.info/>

<sup>18</sup> Dept. for Transport (2018) Sustainable Transport Funding. Available:

<https://www.gov.uk/government/collections/local-sustainable-transport-fund>

<sup>19</sup> Thinktravel (2017) Smarter Choices Evaluation. Available:

<https://www.gloucestershire.gov.uk/media/1519803/gloucestershire-thinktravel-smarter-choices-final-report-270717.pdf>

Tewkesbury Borough). Both the M5 and the A417 are the responsibility of Highways England.

GCC maintains and enhances the local road network within and around Stroud District which includes the following major routes:

- the A38 linking Bristol to Gloucester
- the A417/A419 linking Gloucester and Cirencester with Swindon;
- the A419 between M5 J13 and Cirencester via Stroud;
- the A40 that provides the direct link between Gloucester and Cheltenham (All Vehicles); and links to South Wales (via Ross-on-Wye) in the west and Oxford to the east (HGV traffic)
- the A4109 between M5 J10 and Cheltenham;
- the A46 linking Stroud with Bath and Cheltenham, and
- the M50 which links the M5 and Ross-on-Wye.

The Stroud Sustainable Transport Strategy identifies the key movement corridors for the district being along the A38, the A4135, the A46, the A419 and the B4008.

Bus services are provided by Stagecoach West and Cotswold Green. Generally, bus links between the main towns in the District are good with frequency of every 60 minutes or better. Buses to less populous parts of the district such as Berkeley, Frampton-on-Severn and Painswick are infrequent and, in many cases, require subsidies to support them. Details of the bus services within each Cluster are set out below.

Stroud District benefits from three railway stations; Stonehouse, Stroud and Cam and Dursley. Cam and Dursley benefits from being on the Bristol to Birmingham mainline, whilst Stonehouse and Stroud are on the South Cotswold 'Golden Valley' line between Cheltenham and London.

There has been significant growth in rail use over the last 10 years, with the number of people using trains increasing by 22% (Sustainable Transport Strategy, 2019)

The Rail Investment Strategy outlines that the current service between Cheltenham and London stops at Stonehouse and Stroud on an hourly basis. This route is operated by Great Western Railway (GWR).

The Worcester to Bristol service from Cam and Dursley, which is also maintained by GWR, operates on the basis of one train every two hours.

Stroud District benefits from a plethora of recreational routes including the Stroudwater Navigation and Gloucester/Sharpness Canals and the Cotswold Way National Trail. National Cycle Routes 41 and 45 run through the district.

## The Stroud Valleys

### Highways and Public Transport

The Stroud Valleys cluster is connected to the Strategic Road Network via the A419 which passes to the south of Stonehouse west to Junction 13 of the M5. This route passes through Stroud and links to Cirencester in the east. Other major routes include the A46, which heads south towards Tetbury in Cotswold District, and the A4173 Painswick Road which links to the north of the district.

Stagecoach runs seven bus services into Stroud Town Centre which provide links to Cheltenham, Gloucester, Tetbury and Stonehouse:

- the 52-service links Stroud with Cirencester via Brimscombe;
- the 61-service connects Brimscombe and Eastcombe to Stroud;
- the 63 and 65-services link Stroud to Nailsworth;
- the 66-service connects Cheltenham; and
- the 69-service connects Minchinhampton.

A further five services are run by Cotswold Green, linking Stroud with Nailsworth, Wotton-under-Edge and Cirencester.

## Rail

The Stroud Valleys Cluster benefits from access to rail via Stroud Railway Station. This station has hourly services to Cheltenham and Gloucester in the north and to Swindon and London in the east. Usage of Stroud Railway Station has almost doubled in the period 2001 to 2019.

## Active Travel

National Cycle Route 45 includes traffic-free railway paths and canal towpaths from Nailsworth to Stroud and Stonehouse. The route joins onto National Cycle Route 41 at Frampton-on-Severn.

## The Stonehouse Cluster

### Highways and Public Transport

The Stonehouse Cluster includes Junction 13 of the M5 motorway, which connects to the A419 (to Stroud) and the A38 (to Gloucester and South Gloucestershire). The other main highway route in Stonehouse Cluster is the B4008 Gloucester Road, which connects to Standish and Haresfield. The existing A419 corridor experiences congestion which is anticipated to worsen as the West of Stonehouse (Great Oldbury) development is built-out.

Stonehouse is connected to Stroud by the 61 and 64 bus routes. The latter route also connects to Gloucester. The 66 bus route links Stonehouse with Leonard Stanley and Kings Stanley.

## Rail

Stonehouse Railway Station has hourly services to Cheltenham and Gloucester in the north and to Swindon and London in the east. The station has just 22 car parking spaces.

## Cam & Dursley

### Highways and Public Transport

Cam and Dursley are connected via the A4135, which links the A38 Bristol Road to Tetbury. The B4066 connects Dursley to Uley, Nympsfield and Stroud. The B4060 connects Cam and Dursley to Wotton-under-Edge.

There are four main bus routes in Cam and Dursley, run by Stagecoach:

- The 65-service connects to Stroud via Nympsfield
- the 61 service connects to Stroud via Stonehouse;
- the 60-service links Cam with Gloucester and Thornbury, and
- the 62-service connects Cam with Bristol.

## Rail

Cam and Dursley Station is located to the north of Cam and situated on the Worcester to Bristol line. It benefits from a two-hourly service which connects to Ashchurch (Tewkesbury), Cheltenham and Gloucester. According to the Rail Investment Strategy, Cam and Dursley has seen a 250% increase in passenger usage between 2001 and 2019. As of March 2020, the station has 90 car parking spaces.

## Active Travel

The Cam, Dursley and Uley Greenway project is in construction. Once completed, it will consist of an 8km cycle, horse rider and pedestrian greenway linking Uley, Dursley and Cam.

## The Gloucester Fringe

### Highways and Public Transport

The Gloucester Fringe connects to the SRN via Junction 12 at Hunts Grove. The LTP highlights concerns that this junction is approaching capacity and a scheme of improvements should be developed by the District and County Council's in partnership with Highways England.

The Cross Keys Roundabout is a five-way junction located to the north of Junction 12 which links the A38, the M5 and the B4008. The junction is considered by the County Council to be strategically important for Gloucestershire and was subject to almost £4m worth of improvements in 2019.

Whaddon is currently served by the 63-bus service which links to Stroud and Forest Green (Nailsworth).

Hunts Grove and Hardwicke are both served by the 66X, 60 and 60F services which link into Gloucester City and to Dursley and Stroud.

## The Berkeley Cluster

### Highways and Public Transport

The Berkeley Cluster is bounded by the A38 Bristol Road to the east, with the main route into the cluster being the B4066 which connects Sharpness and Berkeley to the Bristol Road.

Berkeley and Sharpness are connected to Cam and Dursley, and to Bristol, by the 62-bus service. This is an infrequent daytime service.

### Rail

The Sharpness branch line formerly connected Sharpness and Berkeley to the Bristol-Gloucester mainline, but was closed in 1960.

### Active Travel

The Berkeley Cluster is connected to Gloucester via the Gloucester and Sharpness Canal, which runs adjacent to the Severn Estuary. The Canal includes a walking and cycling route.

National Cycle Route 41 runs from Oldbury-on-Severn in South Gloucestershire to Berkeley and then joins the Gloucester and Sharpness Canal at Patch Bridge.

## The Severn Vale

### Highways and Public Transport

The eastern boundary of the Severn Vale Cluster is formed by the M5, and the area is intersected by the A38. Perry Way provides a link from the A38 to Frampton-on-Severn. Frampton-on-Severn is connected to Gloucester by the 60F bus service.

### Active Travel

The Gloucester and Sharpness Canal and its associated walking route runs north to south through the Severn Vale. National Cycle Route 41 passes through the Severn Vale from the Canal to Frampton-on-Severn and then on to Gloucester via Epney. National Cycle Route 45 links Frampton to Stonehouse and Stroud.

## The Wotton Cluster

### Highways and Public Transport

The B4058 Wotton Road connects Wotton-under-Edge to Charfield, South Gloucestershire and north to Nailsworth. The B4060 connects Wotton-under-Edge to Cam and Dursley.

The LTP highlights that there are limited transport links with Wotton-under-Edge, plus traffic and parking issues in the town.

The 60-bus service connects Wotton-under-Edge and Kingswood to Dursley in the north and Thornbury to the south. The 40-service links Wotton-under-Edge with Stroud.

## The Cotswold Cluster

### Highways and Public Transport

Painswick is connected to Stroud and to Gloucester via the B4066 and the A46. The A4173 intersects the Cotswold Cluster and links Stroud with Gloucester.

In Tewkesbury and Cotswold Districts, the A417 is located less than 5km north of Stroud District and forms part of the SRN. An application for a Development Consent Order for offline improvements to the Birdlip Junction between Brockworth and Cowley is due to be submitted in 2021. It is estimated that the project could cost in excess of £250m.

## Planned Provision and Scheme Identification based on revised Housing and Employment Needs

### The Stroud Valleys

Whilst there are no strategic development sites in the Stroud Valleys Cluster, there are a number of local development sites which are anticipated to deliver over 500 homes within Stroud, Brimscombe, Minchinhampton and Nailsworth.

### Highways and Public Transport

Two pinch-points have been identified through the transport modelling (Mott MacDonald, 2020<sup>20</sup>) within the Stroud Valleys Cluster:

- A419 / Bath Road
- A46 / Dudbridge Hill

The A419 / Bath Road junction in Stroud is forecast to approach or exceed capacity as a result of the Local Plan Review growth. This junction includes the convergence of the A46 Bath Road, the A419 Dr. Newton's Way, A419 Cainscross Road and Rowcroft.

It is estimated within the transport model that the A419 southbound approach to the A46 junction would exceed capacity during both the AM and PM Peak. The northbound approach to the mini roundabout would increase to 99% and 100% of capacity during the AM and PM peak respectively. The A419 eastbound approach to the mini-roundabout is also expected to exceed 90% of capacity.

A scheme of highway improvements is not proposed at this junction due to physical constraints and a desire to encourage modal shift away from private car use. It is expected that schemes within the vicinity of this junction provide sufficient or enhance existing alternative travel options to reduce the impacts upon this junction.

The second junction identified within the transport model as approaching or exceeding capacity as a result of growth is the A46 / Dudbridge Hill in Stroud.

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<sup>20</sup> Mott MacDonald (2021) Stroud Local Plan Traffic Modelling – Traffic Forecasting Report.

This location includes the junction of Dudbridge Hill and Walkley Hill with the A46 Bath Road.

It is estimated within the transport model that the movements at Dudbridge Hill and Walkley Hill approaches increase significantly as a result of the Local Plan Review growth, with both exceeding 90% at both the AM and PM peaks. The A46 approach exceeds capacity at the PM peak.

The highway mitigation tested by Mott MacDonald includes widening the eastbound Dudbridge Hill approach. It is expected that growth on allocated development sites within Stroud would contribute to improvements at this location. Contributions may also be required from other infill or redevelopment sites.

Other issues identified within the LTP which may need to be addressed include:

- Access improvements for Stroud Town Centre and Merrywalks
- Access improvements between Eastington and Nailsworth

## Rail

No physical rail infrastructure interventions are proposed within the Stroud Valleys. The Gloucestershire Rail Investment Strategy outlines that improvements to the South Cotswold Line will mainly involve increasing service frequencies and providing services with fewer stops. These potential amendments were also assessed in combination with the proposed interchange hubs, but the hubs showed little effect on London services.

## Active Travel

The LTP identifies a need to create access improvements to national cycle route 45 from Stroud. The route links Gloucester to Cirencester via Nailsworth and runs along the A419 between Stonehouse and Stroud.

An Active Travel Fund bid (tranche 2) has been submitted to provide improvements to existing cycle lanes and a segregated cycle route into Stroud from Cainscross. This is also identified within the Gloucestershire Strategic Cycle Route in the LTP. The bid seeks funding of £75,000.

The former railway route between Nailsworth-Dudbridge-Stroud has been subject to improvements funded by SDC and GCC. There are two sections which remain as requiring improvement. Firstly, signage is poor at Stanley View and the track from Dudbridge Road consists of steep steps which require cyclists to dismount. Secondly, access to the track from Bath Road, Rodborough is also poorly surfaced and steep.

A public consultation is to be undertaken on a potential safe walking and cycling route along the A419 through the Golden Valley between Chalford and Stroud. This is led by Stroud Town Council and the Parish Cycling Group and an Active Travel Fund bid (tranche 2) has been submitted to provide improvements at a cost of £1.9m.

The Horsley Neighbourhood Development Plan identifies a desired active travel link between Horsley and Nailsworth.

Where appropriate, contributions may be sought from development to support the above schemes and improve pedestrian and cycling connectivity in the Stroud Valleys.

## The Stonehouse Cluster

The Stonehouse Cluster includes the development of approximately 700 homes as an extension to the existing West of Stonehouse strategic development site, which was allocated in the 2015. 10ha of employment land is also proposed to be allocated at M5 Junction 13.

## Highways and Public Transport

A total of six pinch-points in the Stonehouse Cluster were identified as part of the transport modelling. These are:

- A38 / Grove Lane
- A38 at Claypits
- M5 Junction 13
- A419 / Oldends roundabout



- A419 / Boakes Drive roundabout
- Bath Road / Peter's Street

At the A38 / Grove Lane and Perry Way (B4071) junction, the transport model indicates an increase in movements would restrict capacity for vehicles to join the A38. .

It is anticipated that improvements to the A38 junction with Perry Way will be required to reduce the pressure on the Grove Lane junction. Highway mitigation is proposed in the form of signalisation at the Perry Way junction. It is likely that the development at and around M5 Junction 13 will need to contribute towards improvements in this location via s.106 agreement.

At the A38 Claypits junction, it is expected that both the A38 approaches will be close to, or may exceed, capacity. Highway mitigation has been tested in the form of signal optimisation and the widening of the approaches to the junction.

It is expected that development at and around M5 Junction 13 will be required to contribute via s.106 agreement towards improvements to this junction. Further consideration of how these capacity improvements may encourage traffic on link roads, such as the A38, A4135 and A419 will also be necessary at application stage.

The transport model indicates that movements at the M5 Junction 13 will increase substantially as a result of the growth set out in the Local Plan Review. The M5 southbound off-slip will increase to 90% of capacity in the AM peak.

Highway mitigation has been tested in the form of a signalisation of each approach arm. It is likely that contributions will be sought from the allocations PS19a Northwest of Stonehouse and PS20 M5 Junction 13 towards progressing a scheme of mitigation in this location.

The A419 / Oldends roundabout is expected to exceed capacity to the west of the junction as a result of the growth set out in the Local Plan Review. Highway mitigation has been tested in the form of a widening of the A419 between the Oldends and Chipmans Platt roundabouts. It is likely that contributions will be sought via s.106 agreement from the allocations PS19a Northwest of Stonehouse and PS20 M5 Junction 13.

Both the eastbound and westbound approaches of the A419 / Boakes Drive roundabout are expected to exceed capacity as a result of the growth set out in the Local Plan Review. Highway mitigation is proposed in the form of widening of the A419 approaches. It is likely that contributions via s.106 agreement will be sought from the allocation PS19a Northwest of Stonehouse to fund this mitigation. Additional link capacity should also be considered at application stage.

The transport modelling indicates that the Bath Road / Peter's Street junction is likely to exceed capacity when accounting for the growth set out in the Local Plan Review. It may not be prudent to implement highway mitigation in this location due to the minor nature of the road. Contributions from development at this location to the previously identified A38 and A419 schemes may be required to reduce traffic demand on this minor route.

Contributions towards the mitigation packages outlined above may also be required from other infill or redevelopment sites.

In addition to the highway mitigation outlined above, sustainable transport measures are outlined in the LTP in the form of a high frequency bus corridor along the A419 and A38 to link Stonehouse and Stroud with Gloucester.

## Rail

A bid has been submitted by Stonehouse Town Council, supported by Stroud District Council to the Restoring Your Railway Fund to reopen the former Bristol Road station on the edge of Stonehouse. The Bristol Road station would connect into the Bristol to Gloucester trainline.

This project is at the feasibility stage, with the Town Council seeking funding for a GRIP2 study to deliver a business case for the station.

A Bristol Road station would have connectivity benefits for proposed developments to the west of Stonehouse (allocation PS19a) and around M5 Junction 13 (allocation PS20). Contributions to this project may be sought as part of the development.

## Active Travel

The Stonehouse Cluster has good links to cycle routes with National Cycle Route 45 and the restoration of the Cotswold Canals has the potential to provide leisure and commuter cycle routes along the Stroudwater Navigation.

Heritage lottery funding has been secured to provide a 4-mile section of canal to Saul Junction and this will tie Stroudwater Navigation to the Gloucester and Sharpness canal. The Stroudwater canal restoration has provided improvements to walking and cycling routes and the link from Stonehouse to Saul and the Sharpness canal towpath will provide an important role as a walking route and as a leisure route for cyclists.

The Local Transport Plan and the emerging Standish Parish Council Neighbourhood Development Plan identify the need to provide a safer walking and cycling route along the B4008. The Stonehouse-Standish-Hardwicke route was identified as part of the District Council's 'call for routes' for Active Travel Fund bids (Tranche 1) as part of a route to link Stroud with Gloucester. Whilst no studies or design work have been carried out to date, enhancement of this route for active travel will be supported.

Improvements in the form of a segregated cycle route have also been identified by GCC Highways to link Stonehouse to M5 J13 along the A419.

In addition to the works to the former railway route between Nailsworth-Dudbridge-Stroud, proposals are being developed to extend the active travel route to connect with Stonehouse. This would require resurfacing and a maintenance regime to manage soil and vegetation.

Contributions may be sought from development towards these schemes to enhance pedestrian and cycling connectivity.

## Cam & Dursley

The Cam & Dursley area is proposed to include two strategic development sites, both of which are located to the north of Cam. It is estimated that these urban

extensions would deliver 1080 homes, with much smaller levels of growth within the existing settlement of Dursley (10 homes).

## Highways and Public Transport

One pinch-point has been identified in the transport modelling within the Cam & Dursley cluster:

- A38 / A4135

The northbound approach on the A38 at the A38 / A4135 junction is expected to exceed capacity in the AM peak and exceed capacity at the PM peak.

Highway mitigation in the form of a widened A38 approach is considered feasible and forms the preferred highway mitigation. It is expected that the proposed allocations at PS24 West of Draycott and PS25 East of River Cam would contribute towards the delivery of this mitigation via s.106 agreement.

Other highways and public transport measures identified in the LTP include:

- Improvements to public transport along the A4135 corridor.
- Contributions and support to sustainable transport measures on the A38 and A4135 sustainable transport corridors.
- Completion of the Dursley Relief Road (long-term goal)
- Junction improvements to the A4135 / B4060 Woodfield and A4135 / B4066 Dursley Road roundabouts in Dursley (long-term goal)

## Rail

The emerging allocation proposals at Cam will be in close proximity to the Cam & Dursley Railway Station. The LTP highlights that there is potential to create an attractive sustainable transport hub using existing and enhanced public transport, walking and cycling at the North East Cam and North West Cam strategic Development sites. Contributions to these projects may be sought as part of the allocations to the north of Cam.



There are ambitions to improve rail access and service frequency through the Greater Bristol MetroWest project which, during Phase 2, could see the provision of a half-hourly service being introduced that would link to Gloucester via Cam and Dursley.

### Active Travel

The development of the Cam, Dursley and Uley Greenway will link the major settlements in the Cluster to the railway station and provide suitable dedicated pedestrian and cycle infrastructure. This scheme is partially being implemented by the development at Littlecombe and north-east Cam. The route could extend to link to the proposed Wisloe Garden Village.

A bid to the DfT Local Pinch Point Fund has been made by the County Council to undertake feasibility work for this scheme. Contributions may also be sought from development within Cam & Dursley towards the Greenway and other active travel schemes in the cluster.

### The Gloucester Fringe

There are three strategic development sites proposed to the south and east of Gloucester; South of Hardwicke has a capacity of 1200 homes; an extension to Hunts Grove will yield 750 homes and Land at Whaddon is being considered as part of the Local Plan Review for 2500 homes. Two employment sites are proposed to be allocated at M5 Junction 12 and Javelin Park.

### Highways and Public Transport

A total of eight pinch-points have been identified within the Gloucester Fringe and in the City of Gloucester arising from the increases in traffic associated with the Stroud Local Plan Review growth. These are:

- A38 Cross Keys roundabout
- M5 Junction 12
- A38 / Epney Road
- St. Barnabas Roundabout

- B4008 / Stonehouse Lane
- A4173 / Brookthorpe
- B4008 / Bristol Road
- A38 / A430 / B4008 Cole Avenue

At the Cross Keys roundabout, it is expected that all entries will exceed 85%, with the A38 southbound entry and B4008 northbound link exceeding capacity. Improvements to mitigate the impacts of Local Plan Review growth include the widening of the A38 southbound approach, signalisation of the northbound approach and optimisation of signals.

The transport modelling indicates that Junction 12 of the M5 is likely to be operating at capacity, with pinch-points identified at the B4008 entries and the northbound on-slip. Highway mitigation has been tested in the form of a new all-movements grade-separated junction and incorporating two overbridges. This scheme is in its infancy and further work will be required to determine its appropriateness in collaboration with Highways England.

The A38 / Epney Road junction is located within Gloucester but is anticipated to be affected by growth within the north of Stroud District. Each of the junction's approaches are expected to exceed capacity. It is likely that improvements will be required in the form of an additional lane along the A38, as well as signal optimisation.

The A38 St Barnabas Roundabout in Gloucester is likely to be affected by the growth proposed at the eastern edge of the city at the allocation G2 Land at Whaddon. The transport model indicates that both the A38 approaches will exceed 100% if no mitigation is proposed, whilst the A4173 will exceed capacity in the northbound, and is forecast to become a rat-run. GCC Highways has identified a potential improvement scheme at the junction, which provides an enlarged roundabout with widening on the A38, A4173 and B4072 approaches. It is expected that contributions would be sought from the Whaddon site to deliver an appropriate scheme of mitigation.

The transport model indicates that the B4008 / Stonehouse junction will exceed capacity as a result of growth. It may not be prudent to implement highway

mitigation in this location due to the minor nature of the road. Further consideration is required to determine an appropriate scheme of mitigation that can also manage demand for through-traffic along through Haresfield.

The A4173 is expected to approach or exceed capacity at the junction with Haresfield Lane at Brookthorpe. It may not be prudent to implement highway mitigation in this location due to the minor nature of the road.

The transport model indicates that the left-turn off-slip from the A38 Bristol Road on the B4008 Bath Road will exceed capacity in both the AM and PM peak. Highway mitigation has been consented; however, further mitigation may be required in the form of optimisation of signal timings.

A further pinch point has also been identified within Gloucester at the A38 / A430 / B4008 Cole Avenue. The transport model indicates that the A38 and A430 approaches are anticipated to exceed capacity without mitigation, whilst the B4008 approach is anticipated to approach capacity. Mitigation is proposed in the form of signal re-optimisation and targeted widening of approach lanes.

It is likely that contributions will be sought via s.106 agreement from proposed allocations at PS30 Hunts Grove extension, PS32 South of M5 Junction 12, PS43 Javelin Park, G1 South of Hardwicke and G2 Land at Whaddon towards the highway mitigation at the pinch points outlined above. Contributions towards the mitigation packages outlined above may also be required from other infill or redevelopment sites.

GCC Highways highlighted in response to consultation as part of the IDP that highways mitigation should be tempered with sustainable transport improvements to reduce private car-reliance and to avoid rat-running through the proposed urban extensions.

The following projects and schemes are also proposed to support growth in and around Stroud District in addition to the transport model outputs:

- The LTP identifies a Strategic Park and Ride expansion at Waterwells in the south of Gloucester.

- Gloucestershire County Council, in collaboration with Highways England, are using monies secured through the Local Growth Fund to deliver a scheme of improvements at Junction 11 between Gloucester and Cheltenham. The works include bridge renewals and improvements to the southbound off-slip road.
- Funding has been secured through the Housing Infrastructure Fund to support improvements at Junction 10 of the M5 in Tewkesbury.

## Rail

Land at Naas Lane on the Hunts Grove strategic development site, allocated in the 2015 Local Plan, was safeguarded as a location for a potential new railway station. A capacity study, to be undertaken by Network Rail, would need to be commissioned by the developer to determine whether a new station could be accommodated without adversely affecting the existing rail line.

## Active Travel

The Sustainable Transport Strategy outlines that a network of walking and cycle routes should be provided throughout the proposed strategic development site at the Hunts Grove extension and to the south of Hardwicke. These sites should seek to provide active travel routes to the Gloucester and Sharpness Canal to the west and contributions may be sought for off-site connections to these routes.

## The Berkeley Cluster

The Wisloe and Sharpness Garden Villages are both drafted to be allocated within the Berkeley Cluster. These sites are expected to deliver some 1,500 homes with 5ha of employment land, and 2,400 homes with 10ha of employment land respectively. The Sharpness Docks site is allocated for 300 dwellings.

## Highways and Public Transport

The proposed allocations at PS34 Sharpness Docks and PS36 New settlement at Sharpness have an issue of relative remoteness, particularly in public transport terms. This increases demand for private car usage.

A total of eight pinch-points have been identified in the transport model within the Berkeley Cluster:

- A38 / B4066
- A38 / Breadstone
- A38 / B4066 Berkeley Road
- A38 / Stone
- A38 / Alkington Lane
- B4066 / Station Road
- A38 / A4135
- A38 / Wick Road
- B4066 / Alkington Lane

The transport model indicates that if unmitigated, the B4066 would exceed capacity at the AM peak as a result of Local Plan Review growth. The A38 southbound would approach capacity. Highway mitigation was tested in the form of the widening of the B4066 approach and signalisation of the junction.

It is expected that unmitigated Local Plan Review growth would result in an exceedance of the capacity of the Breadstone junction with the A38. Mitigation in this location may not be appropriate due to the constrained nature of the junction and the minor nature of the road, and instead, should be addressed via improvements to the aforementioned A38 / B4066 junction.

The transport model indicates that the A38 / B4066 Berkeley Road would exceed capacity both at the AM and PM peak as a result of the Local Plan Review growth. Highway mitigation is required at this location to include traffic signalisation from the B4066 onto the A38. Further consideration will be required to address potential link capacities on the A38.

The A38 junction at Stone is anticipated to exceed capacity during the AM peak. The transport model indicates that there would be large increases in southbound demand on this route associated with the Local Plan Review

growth. Mitigation in this location is unlikely to be appropriate due to the minor nature of the road, which is inappropriate for large volumes of traffic.

The junction of Alkington Lane with the A38 is expected to reach 130% of capacity at the AM peak and 100% at the PM peak. The 'major' mitigation proposed to respond to capacity issues at the A38 / B4066 Berkeley Road would join the A38 in this location. This option would require land acquisition either side of Alkington Lane.

The transport model identifies that the eastbound approach of the B4066 / Station Road roundabout, Berkeley would exceed capacity. Highway mitigation in the form of a widened eastbound approach would be required.

The A38 / A4135 roundabout at Slimbridge is expected to exceed capacity as a result of the Local Plan Review growth. In both the AM and PM peak, the northbound approach is expected to approach or exceed 100%. The transport model considers highway mitigation in the form of a widened northbound approach on the A38.

The final junction within the Berkeley Cluster which is expected to approach capacity is the A38 / Wick Road. Wick Road is assessed as exceeding capacity in the PM peak. Mitigation was considered inappropriate in this location given the nature of Wick Road and the potential for improvements elsewhere nearby.

It is expected that a package of highway mitigation will be required, as outlined above, to respond to the growth proposed at PS33 Northwest of Berkeley, PS34 Sharpness Docks, PS35 Land at Focus School, Wanswell and PS36 New settlement at Sharpness. Contributions via s.106 agreement will be sought as appropriate on these sites and may also be required from other infill or redevelopment sites.

Consultation with GCC Highways highlighted the reliance on the PS36 New settlement at Sharpness providing a high level of trip internalisation. It is therefore vital that supporting infrastructure, such as shops and services, are provided in a timely fashion to minimise out-commuting and reduce pressure on the surrounding highway network.

Concerns are raised in the LTP that the B4066 and Alkington Lane which link the above site allocations to the A38 Bristol Road are not sufficient to support

the levels of growth set out in the Local Plan Review. Corridor improvements remain a short-term priority on the B4066 in the Local Transport Plan.

As set out within the Cam & Dursley area assessment, it is expected that the northbound approach on the A38 at the A38 / A4135 junction will exceed capacity. Contributions towards this mitigation will be sought as part of the allocation for PS37 New settlement at Wisloe.

Elsewhere, Wisloe has good accessibility via road with the A4135 which intersects the site and close proximity to the A38 and M5. The proposed new settlement at Wisloe should seek to deliver a sustainable transport corridor along A38 and A4135.

Although in South Gloucestershire, the transport model has indicated that the new settlement at Sharpness Garden Village may result in capacity issues relating to Junction 14 of the M5 and the B4509 which links the motorway to the A38.

A joint working group has been established with South Gloucestershire Council, Stroud District Council and a number of developers with the aim of delivering a comprehensive scheme and avoiding a piecemeal approach to development and infrastructure delivery.

Highway mitigation in the form of a new junction at Junction 14 has been tested as part of the transport model. A scheme to widen the A38 and the approach from the B4509 are also included within the highway mitigation. It is expected that development within the vicinity of the junction would provide financial contributions towards addressing capacity issues in this location.

## Rail

A bid has been submitted as part of the ‘Restoring Your Railway’ Fund which seeks to reopen the Sharpness branch line to passenger services. This bid was submitted to the DfT by Vale of Berkeley Railway Charitable Trust and Sharpness Development LLP and Stroud District Council.

Concerns were raised in the Gloucestershire Rail Investment Strategy that whilst the reopening of the line could provide sustainable transport to Sharpness and

enable significant growth in the area, analysis shows a very limited GVA impact for a very costly new piece of infrastructure. This was also reflected in the comments from Network Rail and GCC Highways. It is understood Sharpness Development LLP has commissioned Network Rail to undertake a capacity study to determine the impact of reopening the branch line on existing services.

Both the LTP and the Rail Investment Strategy identify an option to develop a new Severn Bridge linking Sharpness to Lydney. This could then provide services from Sharpness to South Wales, but this is considered to be an aspirational project with likely high costs that is not essential to deliver the growth set out in the plan.

## Active Travel

Active travel routes would need to be provided to developments in Sharpness. A potential scheme linking Cam Station to Sharpness/Slimbridge has been identified as a future potential cycle corridor in the Local Transport Plan. Feasibility is yet to be carried out on this potential route. Contributions may be sought from development to support the feasibility and implementation of a cycle route and other active travel options in the Berkeley Cluster.

## The Severn Vale

### Highways and Public Transport

There are no strategic development sites within the Severn Vale area proposed in the Pre-submission Draft Local Plan. Two sites are proposed for allocation in Whitminster totalling 50 dwellings.

As set out within the Stonehouse Cluster assessment, the A38 / Grove Lane junction is expected to exceed capacity and it is likely that improvements to the A38 junction with Perry Way (B4071) will be required. It may be necessary for contributions to be secured from PS44 Northwest of Whitminster Lane and PS46 Land west of School Lane towards highway mitigation at this location.

## Active Travel

The Frampton-on-Severn Parish Council adopted a Cycling and Walking Plan in January 2020, which identifies the need for a link to Frampton village along Perry Way to the A38. It is estimated the cost for implementing the scheme is circa £139,000. Contributions may be sought from development towards this scheme and others within the Severn Vale.

## The Wotton Cluster

There are no strategic development sites within the Wotton Cluster. Two draft site allocations are included in the Pre-submission Draft Local Plan. The first is located to the south of Wickwar Road, Kingswood and would have capacity for 50 dwellings. The second, at Renishaw New Mills, to the north of Kingswood would be estimated for 9 hectares of employment.

## Highways and Public Transport

As set out within the Berkeley Cluster analysis, highway mitigation in the form of a new junction at Junction 14 has been tested as part of the transport model. A scheme to widen the A38 and the approach from the B4509 are also included within the highway mitigation. It is expected that development within the vicinity of the junction would provide financial contributions towards addressing capacity issues in this location.

## Rail

Whilst not within Stroud District, the Rail Investment Strategy has highlighted that the potential reopening of Charfield rail station will allow further sustainable travel opportunities in the area.

## Active Travel

There is a cross border initiative to provide an active travel route or greenway linking the two settlements of Kingswood and Wotton-under-Edge to Charfield and a potential new station with MetroWest connectivity to Gloucester and

Bristol. It is hoped that this would also provide access to the Katharine Lady Berkeley's School and Renishaw employment site. Sustrans have been commissioned to carry out the initial work on this route and are currently undertaking a final design phase.

Contributions may be sought towards the design and implementation of this active travel route and others within the Wotton Cluster.

## The Cotswold Cluster

There are no strategic development sites within the Cotswold Cluster. Washwell Fields, Painswick is proposed to be allocated for 20 dwellings.

## Highways and Public Transport

The Transport Model has not highlighted any issues with the road network within the Cotswold Cluster as a result of the Local Plan Review growth. It may be necessary to provide mitigation for the allocated and windfall sites in the Cotswold Cluster and this should be reviewed on a case-by-case basis and mitigation provided at cost to the developer.

## Active Travel

An active travel route is sought to link to residents to the north of Stroud town centre to Painswick along or adjacent to the A46 with potential to provide a route from Stroud to Cheltenham.

## Sector-specific Funding

The Major Road Network and Large Local Majors (LLM) programmes<sup>21</sup> seek to deliver investment on the most important local authority A-roads from 2020/21. The LLM programme was set up in 2016 to cater for the small number of exceptionally large local highway authority transport schemes that could not be funded through the normal routes such as Local Growth Fund.

<sup>21</sup>Department for Transport (2018) Major Road Network and Large Local Majors programmes investment planning. Available: <https://www.gov.uk/government/publications/major-road-network-and-large-local-majors-programmes-investment-planning>

Since 2014, the Local Growth Fund<sup>22</sup> has secured over £100m for projects across Gloucestershire, including £4m of funding to improve the A419 corridor between Stonehouse and the M5 and £2m to repair the Berkeley Bridges on the A38 in Stroud. Local Growth Funding is explicitly linked to the delivery of housing and job growth within the area.

Planning obligations remain one of the primary mechanisms for funding transport infrastructure to mitigate and respond to growth. S.106 agreements are used to secure improvements that are directly related and demonstrably necessary to support development growth, whilst community infrastructure levy can be utilised to support transport projects across the district and is collected from non-strategic development sites.

Two bids have been submitted to the DfT under the Restoring Your Railway Fund to date for Sharpness and Stonehouse Bristol Road. The third round of Ideas Fund closed in March 2021, with further rounds of funding to be released for advanced proposals.

## Conclusions

The transport modelling has highlighted various locations on the road network which will need improving to mitigate growth set out in the Local Plan Review. Most notable locations requiring interventions include M5 J12, M5 J14, St Barnabas and Cross Keys roundabouts in Gloucester, the A419 corridor in Stonehouse and junctions in Stroud town centre.

Development within the vicinity of these locations will be expected to provide a package of mitigation to address transport and highway impacts. This mitigation should be informed by the transport model and the Sustainable Transport Strategy, as well as the Local Plan Review.

Sites elsewhere in the district will be required to connect into the surrounding infrastructure and contribute towards new or improved walking, cycling and rail facilities within the district.

Sustainable transport measures should be implemented as early as possible in development proposals to ensure residents have suitable travel options for walking, cycling and public transport.

Projects such as improved rail services to link Cam and Dursley, Sharpness and Stonehouse with Gloucester and Bristol will be supported, as well as bus corridor improvements along the A38 and A419.

Collaborative working will be required with South Gloucestershire, Highways England and other Stakeholders to develop a scheme of mitigation to resolve predicted capacity issues at Junction 12, Junction 13 and Junction 14 of the M5 to support the growth set out in the Local Plan.

<sup>22</sup> Gfirst LEP (2017) Gloucestershire Growth Deal. Available: <https://www.gfirstlep.com/about-us/our-vision/gloucestershire-growth-deal/>



## 5 Infrastructure Assessment: Flood Risk Management

### Responsibility for delivery

Flood Risk is managed by a collection of Risk Assessment Management Authorities, who work at a national, regional, county and district level. Table 4 outlines the various stakeholders responsible for flood risk management.

| Service Provider  | Responsibility   |
|---|--|
| <b>Department for Environment, Food and Rural Affairs</b> | DEFRA has overall responsibility for outlining a national policy approach on flood risk. DEFRA provides funding for flood risk management projects through grants to Risk Assessment Management Authorities (RMAs) which includes: the Environment Agency; local authorities; and other bodies responsible for managing flood risk.  |
| <b>Environment Agency</b>                                 | The Environment Agency (EA) has overall responsibility for the strategic management of all sources of flooding and coastal erosion, including main rivers. Its role includes: the development of the national flood and coastal erosion risk management strategy for England; the allocation of funds for and the delivery of projects to manage flood risks from main rivers; working with Lead Local Flood Authorities to develop Flood Risk Management Plans; and gathering data and information to support other Risk Assessment Management Authorities.   |
| <b>Gloucestershire County Council</b>                     | Gloucestershire County Council (GCC) is the Lead Local Flood Authority (LLFA), and since 2010 has had a statutory duty to manage flood risk in partnership with other Risk Assessment Management Authorities. GCC's role under the Flood and Water Management Act 2010 includes: investigating and reporting flooding; managing flood risk from non-main river sources; consenting works on water courses and enforcing works to maintain water courses. GCC is responsible for the development of a Local Flood Risk Management Strategy (LFRMS), which was adopted in 2014. Each year, GCC is required to publish an Annual Progress and Implementation Plan to monitor changes following adoption of the LFRMS. |

| Service Provider                            | Responsibility   |
|---|--|
| <b>Lower Severn Internal Drainage Board</b> | Lower Severn Internal Drainage Board has permissive powers to undertake works to reduce flood risk and manage water and manage land drainage under the Land Drainage Act 1991. The Lower Severn IDB area includes land alongside the River Severn in the Stroud South Vale, Stroud & West and Gloucester Urban Fringe sub-areas, as well as land along the River Frome at Stroud and Stonehouse. |
| <b>Stroud District Council</b>              | Stroud District Council as Local Authority is responsible for managing flood defences and is designated as a category one responder to flood events under the Civil Contingencies Act 2004.  |

Table 5 outlines potential sources of flooding and which corresponding authority is responsible for the management of that body of water.

Table 5 Summary of responsibilities for flood risk management authorities

| Flood Source   | EA | GCC (LLFA) | SDC | STW | GCC (Highways) | IDB |
|--|----|------------|-----|-----|----------------|-----|
| Strategic overview for all sources of flooding & coastal erosion | ✓  |            |     |     |                |     |
| Main River   | ✓  |            |     |     |                |     |
| The Sea  | ✓  |            |     |     |                |     |
| Surface Water  |    | ✓          |     |     |                | ✓   |
| Surface Water (on or coming from the Highway)                    |    |            |     |     | ✓              |     |
| Sewer Flooding   |    |            |     | ✓   |                |     |
| Ordinary Watercourse   |    | ✓          | ✓   |     |                | ✓   |
| Groundwater  |    | ✓          |     |     |                |     |

| Flood Source | EA | GCC (LLFA) | SDC | STW | GCC (Highways) | IDB |
|--------------|----|------------|-----|-----|----------------|-----|
| Reservoirs   | ✓* |            |     |     |                |     |

## Overview of progress since the 2014 IDP

### Literature, Policy and Strategy Changes

**The Stroud District IDP Refresh (2014):** The 2014 IDP outlined that agricultural land and properties in Fretherne-with-Saul, Epney, Arlingham, Longney and Elmore are at a greater risk of flooding in the longer term (by 2030) taking account of climate change.

In respect of the River Severn, the IDP set out that generally the flood defences were in good condition, with the areas of Arlingham, Longney and Elmore likely to require improvements to defences towards the end of the Local Plan period.

The IDP outlined the expectation that a site-specific flood risk assessment (FRA) will be required to demonstrate flood risk is appropriately managed across each of the Strategic Site Allocations. The likely approach to managing flood risk on the Strategic Sites is summarised below:

- **North East Cam:** The site is largely within Flood Zone 1, but marginally affected by flooding. The IDP and the Local Plan outlined an expectation that appropriate masterplanning and the use of surface water attenuation would address this marginal risk.
- **Sharpness Docks:** Around 40% of the site is located within Flood Zones 2 and 3. It was determined that a site-specific FRA would be required to confirm the extent of flood risk management measures required for implementation.
- **West of Stonehouse:** The site is marginally affected by Flood Zones 2, 3a and 3b. No projects were identified at the point of writing the 2014 IDP, however an FRA would be required at application stage and modelling may

be required to take account of potential impacts on the Cotswold Canal and River Frome.

- **Hunts Grove:** The site is marginally affected by Flood Zones 2, 3a and 3b. It was advised that masterplans retained these areas as open space, an FRA was required to confirm the extent of flood risk and a culvert maintenance strategy was required to clear culverts of debris which could increase flood risk.
- **Quedgeley East:** The site was proposed to include safeguarded space for flood storage. It was advised that an FRA is submitted, that surface run-off would need to be managed, and that culverts must be maintained.
- **Stroud Valleys Cluster:** In terms of non-strategic development sites in the floodplain, the EA was progressing a scheme to offer property-level protection to residents adjacent to Slad Brook. Development sites within this location were advised to submit an FRA. The developments at Brimscombe Port and Brimscombe Mill were advised to implement measures such as dredging, redesign of the sluice gates and increasing flood storage. The river channel at Wimberley Mills was to be de-culverted to enable development.

### Changes since 2014 IDP: Overarching Documents

A number of national and local strategy and policy documents have been released or updated since the last iteration of the IDP was published in 2014. These changes are summarised overleaf.



**Revised National Planning Policy Framework (2019)<sup>23</sup>:** The revised NPPF continues to advise directing development away from areas at risk of flooding. Paragraph 155 states that ‘where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere’. Paragraph 156 sets out the approach for policy preparation. It states that policies should be informed by a strategic flood risk assessment and should manage flood risk from all sources. When deciding where to locate development, plan-making authorities should apply a sequential, risk-based approach to the location of development (para. 157).

**Draft National Flood and Coastal Erosion Risk Management Strategy for England<sup>24</sup> (2019):** The Environment Agency is in the process of revising the FCERM strategy, which outlines the objectives for flood and coastal erosion risk management and the measures required to achieve those objectives. The Draft document was published in May 2019 and was consulted on until July 2019 with public, partners and businesses. It is anticipated that the FCERM Strategy will be published in Spring 2020. The Draft FCERM Strategy focusses on creating climate resilient places and aims to align with the government’s sustainable development objectives. In terms of infrastructure, there is an emphasis on improving resilience to climate change and flood events. Greater emphasis will be placed on natural flood management and biodiversity net gain will be sought on flood management projects to provide this resilience and support sustainable development.

**Gloucestershire Local Flood Risk Management Strategy (2014)<sup>25</sup>:** The Local Flood Risk Management Strategy (LFRMS) was at consultation stage when the last iteration of the IDP was published. Since then, the LFRMS has been published and sets out Gloucestershire County Council’s role managing flood

risk. The Strategy details the objectives of the Council and its approach to investment in specific locations.

**Gloucestershire Parishes Flood Risk Prioritisation Assessment, Stroud District Summary Report<sup>26</sup> (2016):** This report outlines the investigations of flood risk undertaken by Gloucestershire County Council (GCC) and the assessment of four Civil Parishes within Stroud: Cam, Nailsworth, Stroud, and Wotton-under-Edge. The aim of the study is to enable GCC to prioritise flood mitigation across Gloucestershire. The Report concludes that a dozen interventions would benefit properties across the four parishes. These schemes are listed within Planned Schemes and Projects.

**Gloucestershire County Council Critical Infrastructure Assessment<sup>27</sup> (2014):** This assessment seeks to identify critical infrastructure at risk of flooding across a variety of flooding events to inform local strategy and emergency response. The outcomes of this assessment have been used to inform the ‘Assessment of Current Infrastructure’ within this chapter of the IDP.

**Severn River Basin District Flood Risk Management Plan<sup>28</sup> (2016):** The Severn River Flood Risk Management Plan (FRMP) is prepared by the Environment Agency and Natural Resources Wales in partnership with LLFAs to assess flood risk relating to main rivers, the sea and reservoirs. The Severn River basin covers five no. county/unitary authorities, including Gloucestershire. Stroud is within the Severn Vale catchment, which is identified as having a long history of river flooding. The role of the FRMP is to highlight the implementation of flood defence schemes, defining roles and responsibilities, and setting objectives to manage flood risk. The FRMP identifies four measures to respond to flood risk: prevention; preparation; protection; and recovery and review. The FRMP is currently under review and is expected to include a number of measures for Stroud District.

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<sup>23</sup>MHCLG (2019) National Planning Policy Framework. Available: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/810197/NPPF\\_Feb\\_2019\\_revised.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf)

<sup>24</sup>Environment Agency (2019) Draft Flood and Coastal Erosion Risk Management Strategy for England. Available: [https://consult.environment-agency.gov.uk/fcrm/national-strategy-public/user\\_uploads/fcrm-strategy-draft-final-1-may-v0.13-as-accessible-as-possible.pdf](https://consult.environment-agency.gov.uk/fcrm/national-strategy-public/user_uploads/fcrm-strategy-draft-final-1-may-v0.13-as-accessible-as-possible.pdf)

<sup>25</sup> Gloucestershire County Council (2014) Local Flood Risk Management Strategy.

<sup>26</sup> Atkins, on behalf of Gloucestershire County Council (2016) Gloucestershire Parishes Flood Risk Prioritisation Assessment, Stroud District Summary Report.

<sup>27</sup> Atkins, on behalf of Gloucestershire County Council (2016) GCC Critical Infrastructure Assessment, Summary Report.

<sup>28</sup> Environment Agency (2016) Severn River Basin District Flood Risk Management Plan. Available: <https://www.gov.uk/government/publications/severn-river-basin-district-flood-risk-management-plan>

**Severn Estuary Shoreline Management Plan<sup>29</sup> (2017 Update):** The Shoreline Management Plan (SMP) is a non-statutory document produced by the Severn Estuary Coastal Group which sets out policies for the management of the Severn Estuary over the next 100 years. The SMP covers an area stretching from Penarth, south Wales, up to Gloucester and then back south to Weston-Super-Mare. Within Stroud, the SMP is relevant for the areas around Sharpness up to Frampton on Severn. The SMP sets out a series of actions to manage the Estuary, including the following within Stroud District: management and maintenance of defences; research of where new defences should; reviewing land at risk of flood/erosion; and ensuring the SMP is considered as part of the SFRA.

**Stroud Level 2 Strategic Flood Risk Assessment<sup>30</sup> (2019):** The Strategic Flood Risk Assessment (SFRA) has been produced to support the preparation of the Local Plan Review by providing updated information on surface water management and sustainable drainage (SuDS) and guidance on site-specific flood risk assessments. It includes an assessment of each of the new proposed site allocations included within the Local Plan Review. It highlights that Stroud District has high potential for the implementation of natural flood management and that rural SuDS have been implemented to address historic flooding issues at Slad Brook, Painswick Stream, Nailsworth Stream and Ruscombe Brook. A total of 10 proposed site allocations proceeded to Level 2 Assessment. These assessments are covered in detail later in the Chapter.

**Stroud District Local Plan: Planning Obligations Supplementary Planning Document<sup>31</sup> (2017):** The Supplementary Planning Document includes details of the approach to integrating flood risk alleviation and drainage measures into development. It highlights a range of techniques to reduce surface water run-off and the wider flood risk.

<sup>29</sup> Atkins, on behalf of the Severn Estuary Shoreline Management Group (2017) Severn Estuary Shoreline Management Plan Review (SMP2)

<sup>30</sup> JBA Consulting, on behalf of Stroud District Council (2019) Stroud Level 2 Strategic Flood Risk Assessment

## Scheme and Project Delivery

### Schemes since 2014

Stroud District Council has led the implementation of two significant infrastructure projects since the last version of the IDP was published:

**The Stroud Rural Sustainable Drainage project** has been delivered by the District Council in cooperation with the County Council, the EA and local landowners to deliver over 540 natural flood management interventions throughout the Frome catchment. Interventions include creating flood storage or slowing the river flow using field bunds, leaky dams, trapping sediment and silt and land scrapes to create attenuation ponds. These interventions have resulted in enhancement of over 25km of the river's length and a 1m reduction in peak river levels on the Slad Brook, which is a tributary of the River Frome. This project currently has funding until 2021.

**Cotswold Canal Restoration** is a collection of four projects to restore various sections of the Thames and Severn Canals and Stroudwater Navigation. The following progress has been made to date:

- £10m Heritage Lottery Funding has been secured for Phase 1b, which links Saul junction to Stonehouse.
- A planning application was submitted in 2019 for the Phase 1b, known as the Missing Mile between Oldbury Brook and Westfield Lock.
- £4m of grant funding has been secured from Highways England to restore parts of the Stroudwater Navigation destroyed by the A38/A419 roundabout and the M5. Work started on this section of the canal in Winter 2019/2020.

<sup>31</sup> Stroud District Council (2017) Planning Obligations Supplementary Planning Document. Available: <https://www.stroud.gov.uk/media/241797/planning-obligations-spd-final.pdf>

- A further planning application is to be submitted in spring/summer 2020 for the Eastington Missing Mile.

**Nailsworth Rapid Response Catchment:** Nailsworth was designated a rapid response catchment by the EA and is one of the ten most at risk communities without a flood warning service within Shropshire, Herefordshire, Worcestershire and Gloucestershire EA areas. The Gloucestershire Parishes Flood Risk Prioritisation Assessment identified potential schemes at George Street and Brewery Lane and GCC has secured capital funding to implement a scheme in Nailsworth.

**The Environment Agency’s FCERM Capital Investment Programme for 2015-2021<sup>32</sup>** outlines the completion of the following schemes since 2014:

- Frampton Outfall Capital Maintenance, Frampton-on-Severn, providing flood defence benefit for 323 properties.
- Slimbridge Culvert Improvements, providing flood defence for an additional 12 properties
- Cambridge Flood Alleviation Scheme, providing flood defence for an additional 8 properties
- Daniels Brook Outfall Capital Maintenance, Tuffley (Gloucester), providing additional flood defence for 85 properties.

## Assessment of Current Infrastructure Provision

### Overview

The Stroud Level 2 Strategic Flood Risk Assessment provides a detailed assessment of the risk to Stroud District from fluvial, groundwater, tidal and surface water flooding. The areas at risk of flooding as identified within Section 4 of the SFRA are highlighted within the table below.

Table 6 Flood Risk in Stroud District

| Parish Cluster     | Settlement / Allocation   | Flood Risk Type              |             |  |               |
|--------------------|---------------------------|------------------------------|-------------|--|---------------|
|                    |                           | Fluvial                      | Groundwater | Tidal                                      | Surface water |
| Berkeley Cluster   | Berkeley                  | River Severn and Little Avon |             | Yes  | Yes           |
|                    | Newtown and Sharpness     | River Severn                 |             |  | Yes           |
|                    | Sharpness Garden Village  | River Severn and River Cam   |             |  | Yes           |
|                    | Wisloe Garden Village     |                              |             |  |               |
| Cam & Dursley      | Cam                       | River Cam                    |             |  |               |
|                    | Dursley                   |                              |             |  |               |
| Cotswold Cluster   | Painswick                 |                              |             |  |               |
| Gloucester Fringe  | Hardwicke and Hunts Grove |                              |             |  |               |
|                    | Land at Whaddon           | Daniel’s Brook               |             |  | Yes           |
| The Severn Vale    | Frampton on Severn        | Reservoir flooding.          |             | Yes (protected by Severn Estuary defences) |               |
|                    | Whitminster               |                              | Yes         |  |               |
| Stonehouse Cluster | Leonard Stanley           |                              |             |  |               |
|                    | Stonehouse                | Stroudwater Canal            |             |  |               |

<sup>32</sup> Environment Agency (2019) FCERM Capital Investment Programme 2015-2021. Available. <https://data.gov.uk/dataset/e96f0619-a89c-4250-af2f-1f16934a5eff/fcerm-capital-investment-programme-2015-2021>

| Parish Cluster | Settlement / Allocation | Flood Risk Type                |             |       |               |
|----------------|-------------------------|--------------------------------|-------------|-------|---------------|
|                |                         | Fluvial                        | Groundwater | Tidal | Surface water |
| Stroud Valleys | Brimscombe & Thrupp     | Cotswold Canal                 |             |       |               |
|                | Minchinhampton          |                                |             |       |               |
|                | Nailsworth              | River Frome                    |             |       |               |
|                | Stroud                  | River Frome and Cotswold Canal | Yes         |       |               |
| Wotton Cluster | Kingswood               |                                | Yes         |       |               |

There are numerous formal flood defences across Stroud District, which seek to protect a number of properties from fluvial and tidal flooding. The flood defences are largely focussed on the bank of the Severn Estuary and includes several lines of large embankments. Areas which are defenced include Upper Framilode, Saul, Frampton on Severn, New Grounds, and parts of Oakhunger and Bevington. However, the areas which are shown to be undefended include Elmore Back, Epney, Arlingham, Berkeley and several other villages.

The SFRA sets out that the major defences in Stroud District are generally ‘Good’ or ‘Fair’ in condition, with some defects which could affect asset performance. Therefore, there are opportunities for future development which would benefit from flood defences to contribute funds to the improvement of these assets.

The SFRA sets out that Stroud District has good potential for natural flood management. This includes measures to reduce the water height of flooding or delaying the arrival of a flood peak by ‘slowing the flow’ and increasing the time available to prepare for a flood. Natural flood management measures

include floodplain restoration; catchment retention using rural SuDS, including in-stream structures such as leaky dams; clearance of structures in watercourses and removing or realigning flood embankments.

Gloucestershire County Council’s Flood Risk Prioritisation Assessment outlines four parishes within Stroud with susceptibility to flooding. The detail of this flood risk, and that informed by the LFRMS and SFRA, is outlined within the following section.

### The Stroud Valleys

In Stroud, the Chalford, Painswick, Nailsworth, Ruscombe and Slad Rivers converge on the town, creating fluvial and pluvial flood risk. The main areas identified as being at risk of flooding in the Flood Prioritisation Assessment were Slad Road and Wallbridge. The Slad Brook is designated as a Rapid Response Catchment, at risk of quickly occurring flood events

At Nailsworth, the Stroud Valleys each conveys a designated Main River; the Miry Brook, Horsley Stream and Gatcombe Water. The Nailsworth Stream, a tributary of the River Frome, flows out of the town. A large proportion of the town is assessed within the LFRMS as being at fluvial flood risk and is designated as a Rapid Response Catchment. Five areas of the parish were identified as being vulnerable to flooding, based on the results of the flood mapping exercise and local knowledge, and these were subject to flood risk investigation. These areas were Brewery Lane; Bridge Street; Fountain Street and Tabrams Pitch; George Street; and Old Market and Spring Hill.

### The Stonehouse Cluster

Flooding has occurred as recently as 2007 from the River Frome in Stonehouse. The floods affected large areas of the rural floodplain in the Stonehouse Cluster and the main town.

The Stroudwater Canal flows through the Stonehouse Cluster. This also experienced flooding as a result of storm events in 2007.

## Cam & Dursley

The catchment of the River Cam is at the highest risk of surface water flooding in Stroud District.

The Cam Civil Parish is at risk to flooding from the River Cam and is ranked within the LFRMS as being the parish with the 14<sup>th</sup> greatest overall flood risk in Gloucestershire. In particular risk are the areas around Spouthouse Lane, Everlands and Alexandra Close. These areas are at risk of Fluvial, Groundwater and Pluvial flooding.

## The Gloucester Fringe

Daniel's Brook is located in the Gloucester Fringe and joins the Gloucester and Sharpness Canal in the City. There is an existing flood relief channel which runs adjacent to the river.

The SFRA states that flooding events associated with Daniel's Brook occurred in July 2007 and December 2008. The areas affected in both events were located on the right bank of the watercourse.

## The Berkeley Cluster

The Berkeley area includes the Sharpness Canal and the Little Avon. The latter becomes the Berkeley Pill, which is an outfall into the River Severn. Flooding along the Berkeley Pill occurs as a result of flood waters from the Little Avon, Dovete Brook and Lynch Brook.

## The Severn Vale

The River Severn forms the western boundary of the Severn Vale and Berkeley Clusters and the western boundary of Stroud District. In these locations, flood events can result from a combination of fluvial and tidal sources.

The SFRA outlines that there have been several significant flood events from the River Severn, most recently occurring in December 2000. A significant proportion of this rural part of the District consists of floodplains.

## The Wotton Cluster

The Dyers Brook flows through the Wotton-under-Edge Parish before discharging into the Little Avon. The Flood Prioritisation Assessment outlines that the area is at risk from fluvial, groundwater and pluvial flooding.

Three areas in Wotton-under-Edge were identified as being vulnerable to flooding in the Flood Prioritisation Assessment; Holywell Road, Knapp Road and Locombe Place; and Wortley Road.

## The Cotswold Cluster

The Painswick Stream runs through the Cotswold Cluster to the Stroudwater Canal. Generally, the risk of flooding in this part of the District is considered to be low.

## Planned Provision and Scheme Identification based on revised Housing and Employment Needs

### District-wide benchmarks and standards

In response to consultation as part of the IDP in April 2020, Gloucestershire County Council outlined that all applications need to be submitted with a drainage strategy and those where the site area is over 1ha or is in Flood Zone 2 or 3 require a flood risk assessment. Any remodelling of a Flood Zone must be validated by the Environment Agency.

Both the LLFA and the District Council support the use of the drainage hierarchy for new developments. This suggests that infiltration should be considered first, then discharge to a watercourse, then finally discharge into public storm/combined sewer.

There are no Environment Agency sponsored schemes proposed within its current 6-year FCERM Capital Investment Programme that relate to any of the sites highlighted within Stroud District.

## Site-specific requirements

Appendix O of the Level 2 SFRA sets out an assessment of each of the allocations proposed for designation as part of the Local Plan Review. These tables provide a detailed assessment of nearby watercourses, flood history, risk of flooding from fluvial, surface water and groundwater sources as well as making recommendations for Local Plan policies and to developers.

A total of eight site allocations within Stroud District are assessed as being at risk from flooding, with a further two allocations proposed to meeting Gloucester City’s unmet housing need also assessed in terms of flood risk.

These allocations are listed within Table 7 below.

Table 7 Site allocations at risk from flooding

| Cluster                | Site Allocation   |
|------------------------|---|
| Stroud Valleys         | PS13 Central River / Canal Corridor   |
| The Stonehouse Cluster | PS20 M5 Junction 13   |
| Cam & Dursley          | PS25 East of River Cam  |
| The Gloucester Fringe  | G1 South of Hardwicke<br>G2 Land at Whaddon   |
| The Berkeley Cluster   | PS33 Northwest of Berkeley<br>PS34 Sharpness Docks<br>PS36 New settlement at Sharpness (Garden Village)<br>PS37 New settlement at Wisloe (Garden Village) |
| The Wotton Cluster     | PS47 Land west of Renishaw New Mills.   |

The development of each of these sites should be informed by consultation with the Lead Local Flood Authority and the Environment Agency.

<sup>33</sup> GCC’s register and record of all structures and features that are anticipated to have an effect on flood risk in the area.

## The Stroud Valleys

### PS13 Central River / Canal Corridor

The site is flanked on northern and southern sides by the River Frome and the Stroudwater Canal.

Whilst there are no historic records of fluvial flooding recorded onsite, there are incidents of surface water and sewer flooding within close proximity of the site. Based on the Environment Agency River Frome Hydraulic Model, 43% of the site is at risk of a 1 in 100-year flood event, with 30% of the site at risk of a 1 in 20-year flood event. The site is at moderate risk of surface water flooding and a moderate risk of groundwater flooding. There is some risk to the site of reservoir flooding and canal flooding from Stroudwater Canal. There are no flood defences within or adjacent to the site.

The SFRA concludes that the sequential test can be satisfied onsite by sequentially locating development on site within Flood Zone 1. A site-specific flood risk assessment will be required to support any future planning application and development will be required to seek to reduce overall flood risk and incorporate SuDS features. The EA has questioned the appropriateness of this allocation in line with the NPPF and has raised concerns that the quantum of development may be an overestimation when considering the sequential test.

No objection is raised by the EA to uses that would be classed as ‘less vulnerable’ upon the site, including short term daytime moorings for tourism, however concerns are raised that the allocation could carry a high risk of an objection being raised by the Environment Agency on flood risk grounds.

The LLFA has confirmed that there are no assets on the s.21 asset register<sup>33</sup>. They advise that given the location of the site and the risk of flooding downstream, betterment in terms of discharge rates should be sought where possible. If the site is to drain into the River Frome, it should include sufficient

flood storage to manage during high flows or potential flood events on the River Frome.

## The Stonehouse Cluster

### PS20 M5 Junction 13

The River Frome forms the south western boundary of the site and the Stroudwater Canal passes through the site.

The southern part of the site was affected by flooding in July 2007 and the Stroudwater Canal was recorded as being subject to overtopping in 2007, causing flooding. There are no flood risk management assets onsite, with no plans for future schemes at this point in time.

Further flood risk modelling is being undertaken to assess the potential impact of works to the Stroudwater Canal and River Frome in this location.

On the basis of modelling prepared by Environment Agency in 2008, the northern parcel of the site is considered to be at low risk of flooding, however the southwestern part of the site is considered to be at risk of flooding. 42% of the site is a risk of flooding from a 1 in 1000-year event, with 13% of the site at risk from a 1 in 100-year event.

The northern part of the site is considered to be at high risk of groundwater and reservoir flooding, whilst the southern part of the site is considered to be a risk of flooding from Stroudwater Canal.

The SFRA concludes that development should seek to implement above ground SuDS features. Infiltration would not be appropriate given the high risk of groundwater flooding. The LLFA advises that if discharging into the watercourse, the applicant must demonstrate the drainage can function during high flows or when watercourse is in flood. Storage features should not be in Flood Zone 3.

With respect to surface water, the LLFA advises that the surface water accumulating in the southwestern corner of the northern site appears to originate on site so should be dealt with by the site's drainage. However, any application should demonstrate how this corner will be drained as it appears to be the lowest

point of the site. An effective exceedance plan is required so that surface water doesn't accumulate in this region or accumulates here safely.

An easement should be provided around the watercourses and the site layout should be designed to consider the watercourses.

It is expected that proposed development will be sequentially located within Flood Zone 1 and the site must satisfy the exception test. A site-specific flood risk assessment will be required to support any future planning application and development will be required to seek to reduce overall flood risk.

The Environment Agency has been party to discussions with the applicant and supports the use of the southernmost parcel of land for open space and canal regeneration.

## Cam & Dursley

### East of River Cam

The River Cam flows along the eastern boundary of the proposed site.

Whilst there are no recorded flood incidents on the site, there were some incidents of sewer flooding in proximity of the site in 2004, 2006 and 2007.

A small part (2%) of the site in the south western corner is within the functional flood plain. Two small surface water flow paths cross the centre and northern edge of the site in a westerly direction during the 1 in 1,000-year event, before entering the River Cam. The site is not at risk of groundwater, reservoir or canal flooding. The LLFA has set out there are no existing assets on the s.21 asset register, and currently no plans for future schemes on the site.

It is anticipated that proposed development will be sequentially located within Flood Zone 1 and the site must satisfy the exception test. A site-specific flood risk assessment and surface water drainage strategy will be required to support any future planning application.

If the proposed development intends to discharge to the Cam, evidence of any necessary agreement for works on third party land will be required. The site



should drain during high flows, when the Cam is in flood, and any storage features should not be located in Flood Zone 3.

Discussions with the Environment Agency have been undertaken with regards to the design of the access bridge and it is considered that a realistic developable area can be defined to the well-defined flood plain extents defined by hydraulic modelling.

## The Gloucester Fringe

### South of Hardwicke

The Shorn Brook, part of which is main river passes through the central and western land parcels of the site. The Gloucester and Sharpness Canal runs adjacent to the site. A flood relief channel is located adjacent to the Shorn Brook on Church Lane. This consists of a twin culvert under Church Lane and an open channel that connects the culvert to the watercourse.

Based on national flood zone mapping, approximately 8% of the site is located within fluvial flood zone. The site is at moderate risk of surface water flooding, with dispersed areas of ponding predicted to occur in low points across the site. There are records of properties on Sticky Lane flooding from the Shorn Brook, however no date is provided.

It is recommended that development proposals are sequentially located within Flood Zone 1. A site-specific flood risk assessment will be required at planning application stage. It is recommended that a detailed hydraulic model of the Shorn Brook is carried out for the site to accurately understand risk to the site. No flood storage features should be located in Flood Zone 3. Concerns have been raised through consultation with the Environment Agency with regard to surface water flooding and this must be properly assessed as part of any application.

### Land at Whaddon

The Main River Daniel's Brook flows in a north-westerly direction through the site before becoming culverted below the railway embankment along the

western boundary. In the south of the site, another ordinary watercourse forms a tributary to the brook.

The site is at relatively high risk of fluvial and surface water flooding on the basis of the Environment Agency 2007 Daniel's Brook 1D-only hydraulic model. There are no historic flood events recorded onsite. There are reports of flooding to the north of the site on Harkwell Close from 2012. The current hydraulic modelling would need to be extended and upgraded.

A flood scheme has been completed on Grange Road at the junction to Bybrook Road to alleviate the above flooding issue. It is therefore vital that any development does not result in an increase in surface water coming off the north of the site. A robust surface water management strategy is important as part of any applications and should include an exceedance plan.

It is recommended that development proposals are sequentially located within Flood Zone 1. A site-specific flood risk assessment will be required at planning application stage.

A surface water flow path from the east of the site at Court Farm, which is not recorded on the EA's Detailed River Network (DRN) maps, should be surveyed and investigated. If culverted, the development should seek to open the culvert up. If there is no evidence of a watercourse or culvert, then the surface water flow path will have to be managed appropriately through the layout of the development. The same applies for the possible watercourse from Brook Farm, identified in the EA's DRN, however, this isn't shown on the latest OS map. If there is a culverted watercourse, this should be opened up.

The Environment Agency has set out via consultation that this development should seek to deliver significant environmental enhancements in addition to flood risk benefits to downstream areas of Gloucester associated with the Daniels and Whaddon Brooks, including improvements to the standard of protection offered by existing schemes.



## The Berkeley Cluster

### Northwest of Berkeley

An unnamed ordinary watercourse, which forms a tributary of the Little Avon, flows in a southerly direction along the western boundary of the site.

There has been one incident of fluvial flooding onsite, in November 2000, with a further five sewer flooding incidents occurring in proximity of the site between 2008 and 2013. The site is also at risk of tidal flooding from the River Severn. There are no existing or planned flood risk management assets onsite.

The Environment Agency hydraulic modelling was unavailable for this site; however, it is estimated that approximately 30% of site, predominantly the western portion of the site, is at risk of a 1 in 100-year flood event. The site is at very low risk of surface water flooding overall, however there is a moderate risk of groundwater flood risk. The site is not at risk of reservoir or canal flooding.

Development on the site should be sequentially located within Flood Zone 1 and only once the Sequential Test has been completed should the Exception Test be applied.

A site-specific flood risk assessment should be undertaken by developers as well as a detailed hydraulic model. A detailed risk assessment of groundwater levels and emergence should be undertaken.

Concerns were raised by the LLFA that the current application onsite (ref. S.20/0100/FUL) does not demonstrate that the site will be able to drain when the site is in flood. Any storage features should seek to sufficiently address this issue.

### New settlement at Wisloe

The site is in close proximity to the River Cam and there have been a number of recent sewer flooding events since 2007 affecting highways and the curtilage of properties.

The site is included within the Environment Agency 2007 River Cam and Wickster's Brook detailed hydraulic model, but only a minor proportion of the site (1%) is considered to be impacted by fluvial flood risk. The site is at high

risk of groundwater flooding, with a greater than 75% chance of groundwater emergence within a given 1km<sup>2</sup> grid square, during a 1 in 100-year event.

The Sequential Test must be satisfied. Only once the Sequential Test is satisfied should the Exception Test be applied. It is anticipated that proposed development will be sequentially located within Flood Zone 1.

The ordinary watercourse on the northern site will need to be surveyed and mapped as part of any application. Any proposals for drainage will have to be split into the separate catchments. The western side of the site north of the A4135 may be difficult to drain to the ordinary watercourse given the levels.

A site-specific flood risk assessment will be required because the site is within Flood Zone 2 and 3 and at risk from sources of flooding other than rivers and the sea.

### Sharpness Docks

The site is in close proximity to the River Severn, which forms the western and northern boundaries of the site. The Gloucester and Sharpness Canal crosses the site in a south-easterly direction from the north-eastern corner.

A small proportion of the site (6%) is within Flood Zone 3a (1 in 100-year event). The site is at low risk of surface water flooding and low to moderate risk of groundwater flooding. There is a risk of flooding from the Gloucester and Sharpness Canal.

The LLFA has highlighted that the EA's Detailed River Network map includes a mistake in this location. The map shows the ordinary watercourse that enters the east of the site at the village hall go south west towards the B4066 and travel south. Its route instead goes northwest under Oldminster Road, Sharpness Play Park and the railway, through the recycling area, then follows parallel to the docks and outfalls at the River Severn.

Development on site should be sequentially located within Flood Zone 1 where possible, and if not possible, an Exception Test must be satisfied.

A site-specific flood risk assessment is required at planning application stage, along with a surface water drainage strategy. Appropriate storage of surface water runoff will need to be provided, and assessments should identify

opportunities to provide off-site betterment, to help offset the cumulative impact of development.

As the site is a brownfield site, the applicant should seek a betterment in discharge rate of at least 40% over the current rate.

The Environment Agency is actively considering changes to the Shoreline Management Plan that would affect this site and the developer is advised to engage with them on this issue.

### New settlement at Sharpness

The proposed site allocation is formed of two land parcels. The River Severn forms the western boundary of the southern parcel, with the Little Avon forming the boundary to the south of the site.

The site was subject to fluvial flooding in 2012 from the Little Avon.

Over a third of the site is considered to be at risk of a 1 in 100-year flood event from tidal/fluvial flooding from the River Severn and around a quarter of the site is considered to be at risk of a 1 in 100-year flood event from Little Avon. The site is at low risk of surface water flooding and low to moderate risk of groundwater flooding.

The southern part of the site benefits from flood defences in the form of a coastal embankment, which provides a protection from a 1 in 100-year flood. The northern part of the site is not covered by this embankment and there remains a risk across the site from the Little Avon.

Development on site should be sequentially located within Flood Zone 1 where possible, and if not possible, an Exception Test must be satisfied. Any application should include storage features outside of Flood Zone 3. The ordinary watercourses onsite will require an easement for maintenance and the development should be designed to consider the watercourses.

The Environment Agency is actively considering changes to the Shoreline Management Plan that would affect this site and the developer is advised to engage with them on this issue.

## The Severn Vale

None of the proposed strategic or local development locations in the Severn Vale Cluster are subject to known site-specific flood issues, however, any application for a site larger than one hectare should be accompanied by a site-specific FRA, and the development should accord with the drainage hierarchy.

## The Wotton Cluster

### Land west of Renishaw Mills

The site is adjacent to the Marlees Brook, a main river, which runs along the northern site boundary. Whilst there are no historic flood extents or incidents recorded within the site boundary, there has been one incident of groundwater flooding in 2014. Other flood events were recorded by the LLFA in 2007 and 2012.

Approximately 4% of the site is at risk from both fluvial and surface water flooding. The LLFA has confirmed that there are no assets on the s.21 asset register and no schemes are planned for the site at the time of writing.

It is recommended that development proposals are sequentially located within Flood Zone 1. A site-specific flood risk assessment will be required at planning application stage.

The LLFA advises that the site may have to be split into two catchments as part of any application. One should discharge to the north and one southern catchment discharging to the east. A survey should be undertaken of the southern catchment as there is a surface water flow path that may be the start of a watercourse, but which isn't marked on the EA's Detailed River Network map. Any work that needs to be carried out on third party land must have agreement from the relevant third party and this must be supplied with the planning application.

## The Cotswold Cluster

None of the proposed strategic or local development locations in the Cotswold Cluster are subject to known site-specific flood issues, however, any application for a site larger than one hectare should be accompanied by a site-specific FRA, and the development should accord with the drainage hierarchy.

## Sector-specific Funding

For new development locations without existing defences or where the proposed development is the only beneficiary, there is an expectation that the developer funds and implements their own flood risk management and drainage schemes. These assets must be maintained by the developer throughout the life of their operation, or if being adopted, the maintenance funded.

In some cases, following the application of the Sequential Test, it may be necessary for the developer to contribute to the improvement of flood defence provision that would benefit both proposed new development and the existing local community. In these cases, it may be appropriate for the developer to provide a contribution through the planning process to a more wide-ranging solution or improvements to existing assets.

The Stroud District Council Community Infrastructure Levy (CIL) Charging Schedule identifies strategic flood risk management infrastructure, and as such it is assumed that CIL will be used to part-fund improvements to flood defences and the canal restoration.

Other funding sources available to risk management authorities include capital funding from the County and District Council, the Severn and Wye Regional Flood and Coastal Committee and the Severn Trent Community Fund.

## Conclusions

Development on site should be sequentially located within Flood Zone 1 where possible, and if not possible, an Exception Test must be satisfied.

All major applications, and those sites in Flood Zones 2 and 3, require a flood risk assessment. It is expected that developers accord with the drainage hierarchy, creating flood storage where appropriate and implement measures to ensure that surface water is not increased onsite or elsewhere.

Any flood risk schemes should be delivered (or funded) entirely by developers, unless the scheme were to have wide-ranging benefits for other development sites or for existing properties.

## 6 Infrastructure Assessment: Education

### Responsibility for delivery

The following organisations are responsible for providing primary, secondary and further education and early years services in Stroud District.

| Service Provider                                      | Responsibility  |
|---|---|
| <b>Gloucestershire County Council (GCC Education)</b> | The County Council has a statutory duty Under Section 11 of the Childcare Act 2006 and Education Act 2011 to provide free early years education for all eligible young children.<br>Under the Education Act 1996, the County Council has a statutory duty to make sure there are enough school places for children and young people up to 16 who live in the county. The Act requires that these places are of good quality with enough space to promote parental choice and diversity.<br>This includes primary and secondary education and Councils should secure provision for children with special educational needs and disabilities. |
| <b>Department for Education</b>                       | The 2011 Education Act requires that, where a need for a new school is identified, the County Council invites proposals to establish a free school or academy, with the decision over whether to go ahead ultimately taken by the Secretary of State for Education.   |
| <b>Academy and Free School Trusts</b>                 | When invited to do so by the lead education authority (GCC), Academy and Free School Trusts can establish new schools under the provisions of the 2011 Education Act  |

### Overview of progress since the 2016 IDP

#### Literature, Policy and Strategy Changes

**The Stroud District IDP Refresh (2014):** With regard to early years provision, the 2014 IDP outlined that there were eight children’s centres in Stroud District

and within Gloucester, close to the north of Stroud, offering varying types of childcare and education. There was particularly high demand for places in Gloucester and the Wotton Children’s Centre. Based on GCC Education’s 2014 benchmarks, it was estimated that there would be demand for 600 new places at a cost of £7.1m. No specific Early Year’s provision projects were identified through consultation.

The IDP flagged the challenges that the changes as a result of the 2011 Education Act had on the schools planning process. The creation of Academies and Free Schools and the autonomy these schools are given was noted as potentially reducing the effectiveness of school planning.

It was estimated that the growth set out in the Local Plan would create demand for around 2,200 primary school places at an estimated capital cost of £26m; and 1,250 secondary school places (including 6th form) were required at an estimated capital cost of between £22m. A further 120 places were expected to be required for further education, at a cost of £1.8m.

New primary school provision was expected at Hunts Grove, whilst contributions were expected towards secondary education. Elsewhere in the district, there was an expectation that development contributed towards existing schools.

### Changes since 2014 IDP: Overarching Documents

**Revised National Planning Policy Framework (2019):** The NPPF (Paragraph 20) requires strategic policies that set out an overall strategy for the pattern, scale and quality of development, and make sufficient provision for community facilities, inclusive of education infrastructure.

To promote healthy and safe communities, it is important that a sufficient choice of school places is available to meet the needs of existing and new communities. Local planning authorities should take a proactive, positive and collaborative approach to meeting this requirement, and to development that will widen choice in education (Paragraph 94).

**Securing developer contributions for education<sup>34</sup> (2019):** This Department for Education document provides guidance on how local authorities can secure developer contributions for education to respond to increases in demand for school places associated with housing growth. It outlines the need to adequately mitigate the impacts of development and how developer contributions are supporting basic need grants, free school programmes and other capital funding to support school expansions and improvements.

It supports the creation of up-to-date pupil yields and costs (benchmarks) and sets out that Local Education Authorities, in cooperation with the Local Planning Authority, should identify preferred and contingency options to school expansion in planning obligations, as well as seeking to safeguard land through the local plan process.

**Stroud District Local Plan Review – Pre-submission Draft Plan, Stroud District Council (2019):** The Draft Local Plan identifies “improving access to services such as health and education, and jobs” as a ‘priority issue’<sup>35</sup> to promote health and wellbeing of the District.

The allocated sites are identified as needing to provide education infrastructure onsite or as having good access to schools. The open space and community strategy set out within the Pre-submission Draft Local Plan seeks to support the planned provision of community facilities alongside housing growth.

### Changes since 2014 IDP: Early Years’ Education

**Gloucestershire Childcare Sufficiency Assessment, Gloucestershire County Council<sup>36</sup> (2019):** In accordance with the Childcare Act 2006, GCC Education undertakes a Childcare Sufficiency Assessment on annual basis to analyse of childcare supply and demand for childcare in the county. It assesses demand for early years places on the basis of children’s entitlement to 15 hours (30 hours for some) a week of early education.

The Sufficiency Assessment sets out that GCC Education is seeking to reducing the development gap for children from disadvantaged backgrounds and ensuring

that children start school reaching a good level of development. The number of children in Gloucestershire achieving good levels of development has historically been below the national average, but as of 2018/19, children appear to be developing above the average.

There are currently 784 childcare settings across the county, providing 16,567 childcare places for children aged 0-5 years. These are made up of 410 childminders, 148-day nurseries, and 206 pre-schools, 16 Nursery units in independent schools and 4 private non-maintained nurseries.

The Assessment sets out that the quality of childcare in Gloucestershire is generally good; 88% of 2 years old and 92% of, 3- and 4-year olds have access to ‘good’ or ‘outstanding’ provision.

It concludes by outlining that the available provision in Gloucestershire is sufficient to meet demand, with the early years’ population expected to remain stable for the foreseeable future.

### Changes since 2014 IDP: Primary and Secondary Education

**School Places Strategy, Gloucestershire County Council (2018-2023):** The School Place Planning Strategy examines the duties placed upon the County Council by the Department for Education and provides an analysis of current primary and secondary school provision.

For the foreseeable future there are increasing pupil numbers in the majority of areas of Gloucestershire, focused mainly in urban areas. The growth in primary schools has been evident and this pressure is now moving into the secondary years and is increasing year by year. The 16-18 numbers falling reflects a period of decline in numbers in secondary between 2010 and 2013.

In Stroud, the Office for National Statistics (ONS) estimate that the number of 0-19-year olds will increase by approximately 412 between the 2013 and 2017 mid-year population estimates. This is a result of an increase of 699 5-10-year olds in Stroud, with the number of 0-4, 11-16- and 17-19-year olds dropping for

<sup>34</sup>Department for Education (2019) Securing developer contributions for education. Available: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/843957/Developer\\_Contributions\\_Guidance\\_update\\_Nov2019.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/843957/Developer_Contributions_Guidance_update_Nov2019.pdf)

<sup>35</sup> Priority Issues identified in the Draft Local Plan take into consideration local views, national policy and evidence where available, and are considered priorities for the Draft Local Plan to tackle.

<sup>36</sup> Gloucestershire County Council (2019) Gloucestershire Childcare Sufficiency Assessment Summary



each. These figures account for demographic change only and does not consider houses yet to be delivered and concerns are raised within the Schools Places Strategy that the forecasts have appeared to underestimate the need historically. The Strategy now includes consideration of expected levels of new housing from the six district councils in planning.

Concerns are raised within the Schools Places Strategy that planning obligations were not secured for several historic housing developments within Stroud District. Primary school pupils arising from these developments are expected to fill capacity in local schools. It is considered that there would be a small number of cases were s.106 funding will be used to mitigate increases in secondary-age pupils.

## Scheme and Project Delivery

### Schemes since 2014: Primary and Secondary Education

The following projects have been delivered since the 2014 version of the IDP.

- **New Primary School at Land West of Stonehouse, Nastend Lane** – The s.106 agreement for application S.14/0810/OUT secured a 1.5 form of entry primary school, to be provided onsite. No secondary education contributions were secured as part of the application. (2016)
- **New Primary School at Hunts Grove, Hardwicke:** The s.106 agreement for application S.15/1498/VAR secured a new primary school on the Land at Colethrop Farm and £3.6m secondary education contribution. The school opened for September 2019.
- **Expansion of Slimbridge Primary:** Increase in capacity at Slimbridge Primary where the school is oversubscribed due to new housing. Works undertaken in 2018.
- **Expansion of Lakefield School:** In 2016, minor extension works were undertaken at the school to support additional pupils arising from Arlingham due to demographic growth.

## Assessment of Current Infrastructure Provision

### Early Years' Education

#### District-wide requirements

Early years' places are provided through a mix of both private and publicly maintained providers. These include childminders, day nurseries, pre-school playgroups, nurseries as part of schools

The number of early years' providers in Stroud have remained largely static over recent years.

The Childcare Sufficiency Assessment (2019) sets out that within Stroud District there are 191 providers of early years care. This includes the following split of care.

Table 9 Early years' providers in Stroud District

| Provider                            | No of providers | No of registered places |
|-------------------------------------|-----------------|-------------------------|
| Childminders                        | 71              | 445                     |
| Day Nursery (non gov run)           | 15              | 709                     |
| Day Nursery (gov run)               | 1               | 55                      |
| Pre-School Playgroup (non gov run)  | 35              | 805                     |
| Pre-School Playgroup (gov run)      | 12              | 250                     |
| Nursery Unit of Independent Schools | 3               | 74                      |
| Private Nursery School              | 0               | 0                       |
| Out of school (non gov run)         | 21              | 506                     |
| Out of School (gov run)             | 15              | 261                     |
| Holiday Playscheme                  | 18              | 437                     |

Between 80% and 100% of the non-government run providers achieved either good or outstanding in their Ofsted inspections, with the remainder achieving

compliance. Two-thirds of the government run pre-school playgroups were assessed as requiring improvement, and 8% of holiday play schemes failed to meet the necessary standards in inspections.

## Primary and Secondary Education

Concerns are raised within the Schools Place Strategy that generally there is limited capacity in primary schools in the area due to an historic failure to secure contributions on housing sites. The picture for secondary education is better, and most of the secondary schools have been able to accommodate pupil growth associated with development to date.

### Stroud Valleys

There are 28 primary schools in the Stroud Valleys. Seven primary schools are in the Nailsworth area, nine primary schools are in the Eastcombe area, six primary schools are in Stroud's town centre and six are in the Cainscross / Whiteshill area.

These schools are listed below:

- Amberley Parochial School
- Avening Primary School
- Bisley Blue Coat C of E Primary School
- Brimscombe C of E Primary School
- Bussage C of E Primary School
- Callowell Primary School, Stroud
- Cashes Green Primary School, Stroud
- Chalford Hill Primary School
- Miserden C of E Primary School
- Nailsworth C of E Primary School
- Oakridge Parochial School
- Randwick C of E Primary School
- Rodborough Community Primary School, Stroud
- Severn View Primary Academy, Stroud
- St. Dominic's Catholic Primary Academy, Inchbrook
- St. Matthew's C of E Primary School

- Christ Church C of E Primary School, Chalford
- Eastcombe Primary School
- Foxmoor Primary School, Stroud
- Gastrells Community Primary School, Stroud
- Horsley Church of England Primary School
- Minchinhampton School
- Stroud Valley Community Primary School
- The Rosary Catholic Primary Academy, Stroud
- Thrupp Primary School
- Uplands Community Primary School, Stroud
- Whiteshill Primary School
- Woodchester Endowed C of E Primary School

The Schools Place Strategy outlines that there has generally been a fall in the numbers of births in the Stroud Valleys cluster and there is a small surplus of primary school places within the Cluster.

At present, children within the Stroud Valleys are would be expected to go to one of the following secondary schools:

- Archway School, Stroud
- Stroud High School
- Marling Grammar School, Stroud
- Thomas Keble School, Eastcombe

In the far south of the cluster, some children may travel to Tetbury to Sir William Romney's School.

### The Stonehouse Cluster

There are five primary age schools in Stonehouse area. These are:

- Eastington Primary School
- Leonard Stanley C of E Primary School
- Stonehouse Park Infant School
- King's Stanley C of E Primary School
- Park Junior School, Stonehouse



Smaller housing developments in Eastington, Kings Stanley and Leonard Stanley have given rise to a need for some additional capacity and as such, there is limited capacity within the Stonehouse area. A new primary school is to be provided on the West of Stonehouse development site, which was granted permission in 2016.

Secondary school pupils would be expected to go to Maidenhill School in Stonehouse, or to one of the four Stroud Valleys secondary schools. The School Places Strategy outlines that Maidenhill currently has very limited capacity (circa 5%).

### Cam & Dursley

There is a total of six primary schools, one infant and one junior school in the Cam & Dursley Cluster. These are:

- Cam Everlands Primary School
- Cam Hopton C of E Primary School
- Cam Woodfield Infant School
- Cam Woodfield Junior School
- Coaley C of E Primary School
- Dursley C of E Primary Academy
- St. Joseph's Catholic Primary School, Nympsfield
- Uley C of E Primary School

A contribution has recently been received to improve the Dursley Primary Academy to support needs associated with the housing development at the former Lister Petter site. An increase of a half form of entry is planned in September 2020. As a result, there is currently some capacity in the Dursley area.

There is one secondary school within the cluster; Rednock School in Dursley. Pupils may also travel to Katharine Lady Berkeley's School in Wotton-under-Edge. These schools will be overcapacity by 2021 based on forecasts within the School Places Strategy.

### The Gloucester Fringe

There is one primary school within the Gloucester Fringe. Hunts Grove Primary Academy opened in 2019.

There has been a significant increase in demand for school places within the Cluster as a result of demographic and housing growth.

There are no existing secondary schools within the Gloucester Fringe. Pupils would likely attend schools in the southern part of Gloucester.

Beaufort Academy and Severn Vale School, both of which are in Gloucester, have both recently expanded by one form of entry and increased admission numbers support growth from the Hunts Grove Development.

### The Berkeley Cluster

In the Berkeley Cluster, there are four primary schools:

- Berkeley Primary School
- Sharpness Primary School
- Slimbridge Primary School
- Stone with Woodford C of E Primary School, Stone

Berkeley and Slimbridge primary schools have both experienced high demand from local families and Berkeley is one of the few areas which has experienced natural (non-housing related) demographic growth. Slimbridge Primary recently expanded in 2015 and 2019 and as such there is a small surplus of places, but this is likely to be fully utilised by 2021/22.

Whilst there are no secondary schools within the Berkeley Cluster, pupils of secondary age would typically attend Katharine Lady Berkeley's School, Wotton-under-Edge or Rednock School, Dursley.

### The Severn Vale

There are two primary age schools in the Severn Vale area:

- Lakefield C of E Primary School, Frampton-on-Severn.
- Whitminster Endowed CE Primary School

The Schools Places Strategy highlights that there has recently been a lack of capacity within the Frampton-upon-Severn area. This has partly been addressed by improvements to the Lakefield Primary School, however there is still virtually no capacity in the area.

There are no secondary schools within the Severn Vale Cluster. Pupils aged 11-16 would likely attend school in Stonehouse or Stroud.

### The Wotton Cluster

There are five primary schools within the Wotton Cluster. Two of these are in Wotton, with a further primary school each in North Nibley, Hillesley and Kingswood.

- Blue Coat C of E Primary School, Wotton-under-Edge
- Hillesley C of E Primary School
- North Nibley C of E Primary School
- The British School, Wotton-under-Edge
- Kingswood Primary School

Concerns have been raised by Gloucestershire County Council that whilst there is sufficient supply elsewhere in the Wotton Cluster, there is a lack of capacity at Kingswood Primary School due to increased demand for places from recent development.

The Katherine Lady Berkeley's School is a secondary school located between Wotton-under-Edge and Kingswood. It is predicted that this school will be overcapacity by 2021 based on forecasts within the School Places Strategy.

### The Cotswold Cluster

There are three primary schools in and around Painswick:

- Cranham C of E Primary School
- Sheepscombe Primary School
- The Croft Primary School, Painswick

The Croft Primary School temporarily increased its intake in 2015 to respond to a large intake cohort. The Schools Places Strategy outlines that there is a small surplus of spaces in the area.

Pupils aged 11-16 in the Cotswold Cluster would be expected to travel to Stroud, Stonehouse or Eastcombe for secondary education.

### Further Education

South Gloucestershire and Stroud College provides post-16 education at its campus in Stroud and the following schools provide sixth-form education:

- Archway School, Stroud
- Katherine Lady Berkeley's School, Wotton-under-Edge
- Rednock School, Dursley
- Stroud High School
- Marling Grammar School, Stroud

## Planned Provision and Scheme Identification based on revised Housing and Employment Needs

### Early Years

#### District-wide requirements and standards

GCC Education has provided the following benchmark for measuring the likely demands for early years’ places arising from developments in Stroud District, as well as the costs of providing each place. Table 10 outlines the demand for places per 100 dwellings alongside the cost per pupil.

Table 10 Demand and costs for early years’ places (GCC Education, 2020<sup>37</sup>)

| Early years                       |                    |
|-----------------------------------|--------------------|
| Demand (Places per 100 dwellings) | Cost (£ per pupil) |
| 30 per 100 dwellings              | £15,091            |

Table 11 uses the above benchmarks to assess the numbers of early years’ places required to respond to the growth set out in the Local Plan Review and the costs to provide childcare places for those children.

The Department for Education provides funding for eligible families with 2-year-olds to 570 hours of free early education or childcare each academic year and all 3- and 4-year olds in England are entitled to 570 hours of free early education or childcare (universal) each academic year.

It is expected that each of the strategic development sites should provide facilities for early years’ education, either as part of a primary school onsite or as part of other community facilities.

Developments elsewhere will provide contributions via s.106 agreement or CIL where appropriate. This will be assessed on a case by case basis.

Based on the levels of growth set out in the Local Plan Review, there would be **demand for an additional 3,620 early years’ places at a cost of £55m.**

Housing developments at Cam North West, Stonehouse North West, Sharpness Garden Village, Wisloe Garden Village, South of Hardwicke, Hunts Grove and Whaddon are considered to be of a sufficient size to require the provision of new, onsite early years facilities. In most cases, this would be part of a new primary school (see section on planned provision for primary and secondary education).

Red text within Table 11 denotes those sites that are not currently proposed to meet the housing needs of Stroud District Council.

<sup>37</sup> Gloucestershire County Council IDP Consultation Response (April 2020)

Table 11 Summary of Early Years' Demands and Costs

| Ref                     | Site Allocation                              | Ward Cluster                 | Housing Delivery to 2040 | Population   | Pre-school      |                       |
|-------------------------|--|------------------------------|--------------------------|--------------|-----------------|-----------------------|
|                         |  |                              |                          |              | Demand (Places) | Cost (£)              |
| PS24                    | Cam North West (West of Draycott)            | Cam & Dursley                | 900                      | 2115         | 270             | £4,074,570            |
| PS25                    | Cam North East Extension (East of River Cam) | Cam & Dursley                | 180                      | 423          | 54              | £814,914              |
| PS28                    | Dursley                                      | Cam & Dursley                | 10                       | 24           | 3               | £45,273               |
| PS19a                   | Stonehouse North West                        | Stonehouse Cluster           | 700                      | 1645         | 210             | £3,169,110            |
| PS16 & PS42             | Leonard Stanley                              | Stonehouse Cluster           | 40                       | 94           | 12              | £181,092              |
| PS17                    | Stonehouse                                   | Stonehouse Cluster           | 10                       | 24           | 3               | £45,273               |
| PS01 & PS02             | Brimscombe & Thrupp                          | Stroud Valleys               | 190                      | 447          | 57              | £860,187              |
| PS05                    | Minchinhampton                               | Stroud Valleys               | 80                       | 188          | 24              | £362,184              |
| PS06 & PS07             | Nailsworth                                   | Stroud Valleys               | 90                       | 212          | 27              | £407,457              |
| PS10, PS11, PS12 & PS13 | Stroud                                       | Stroud Valleys               | 165                      | 388          | 49.5            | £747,005              |
| PS34                    | Sharpness Docks                              | The Berkeley Cluster         | 300                      | 705          | 90              | £1,358,190            |
| PS36                    | Sharpness (Garden Village)                   | The Berkeley Cluster         | 2400                     | 5640         | 720             | £10,865,520           |
| PS37                    | Wisloe (Garden Village)                      | The Berkeley Cluster         | 1500                     | 3525         | 450             | £6,790,950            |
| PS33                    | Berkeley                                     | The Berkeley Cluster         | 170                      | 400          | 51              | £769,641              |
| PS35                    | Newtown & Sharpness                          | The Berkeley Cluster         | 70                       | 165          | 21              | £316,911              |
| PS41                    | Painswick                                    | The Cotswold Cluster         | 20                       | 47           | 6               | £90,546               |
| G1                      | South of Hardwicke                           | The Gloucester Fringe        | 1350                     | 3173         | 405             | £6,111,855            |
| PS30                    | Hunts Grove Extension                        | The Gloucester Fringe        | 750                      | 1763         | 225             | £3,395,475            |
| HAR017                  | Hardwicke                                    | The Gloucester Fringe        | 10                       | 24           | 3               | £45,273               |
| <b>G2</b>               | <b>Land at Whaddon</b>                       | <b>The Gloucester Fringe</b> | <b>3000</b>              | <b>7050</b>  | 900             | £13,581,900           |
| PS44                    | Frampton-on-Severn                           | The Severn Vale              | 30                       | 71           | 9               | £135,819              |
| PS45 & PS46             | Whitminster                                  | The Severn Vale              | 50                       | 118          | 15              | £226,365              |
| PS38                    | Kingswood                                    | The Wotton Cluster           | 50                       | 118          | 15              | £226,365              |
| <b>TOTAL</b>            |  |                              | <b>12065</b>             | <b>28353</b> | <b>3620</b>     | <b>£54,621,874.50</b> |

## Primary and Secondary Education

### District-wide requirements and standards

The School Places Strategy and consultation with GCC Education in both 2019 and 2020 have been used to estimate future demand for school places within Stroud District when considering the growth set out in the Pre-submission Draft Local Plan.

GCC Education set out that generally a development of over 500 dwellings would be required to provide a one form of entry primary school. This should be provided on a 2ha site in order to allow for potential future expansion.

Requirements for the provision of a new secondary school will be assessed on a case-by-case basis, but typically GCC Education would seek a four form of entry secondary school as a minimum on an 8ha site to enable future expansion.

All-through school models (i.e. incorporating nursery, primary and secondary on one site) are supported, but would typically require a 9-10ha site.

In terms of demand for pupil places arising from new development, the standards set out in Table 12 apply. Each of the demand figures are per 100 dwellings, whilst the cost figures are in pounds per pupil. These costs do not include site acquisition or site development.

Table 12 Demand and costs for primary and secondary pupil places (GCC Education, 2020<sup>38</sup>)

| Primary education                 |                    | Secondary education               |                    |
|-----------------------------------|--------------------|-----------------------------------|--------------------|
| Demand (places per 100 dwellings) | Cost (£ per pupil) | Demand (places per 100 dwellings) | Cost (£ per pupil) |
| 41                                | £15,091            | 20                                | £23,092            |

<sup>38</sup> Gloucestershire County Council IDP Consultation Response (April 2020)

<sup>39</sup> Gloucestershire County Council (2021) School Census Spring-January. Available: <https://www.gloucestershire.gov.uk/education-and-learning/school-admissions-scheme-criteria-and-protocol/pupil-numbers-in-gloucestershire-schools/>

It is noted that the demand for primary and secondary school places, as set out in Table 12 has been subject to challenge through the consultation process on both the Schools Places Strategy and the Local Development Guide (GCC, 2021). Concerns have been raised that the benchmarks are inappropriate and inflates the predicted pupil yields associated with new development.

To establish a range as a basis for further testing, an alternate approach has been to look at the proportion of the current population attending schools and to compare with the GCC benchmarks.

Utilising the School Census (GCC, 2021<sup>39</sup>) and the Current Population of Gloucestershire (GCC, 2019<sup>40</sup>), it has been possible to determine likely demand figures per 100 dwellings. These demand figures are set out below and are based on the population of Gloucestershire as of 2019, which was 637,070. The school population in January 2021 was:

- Population of Primary Schools: 47,398 (equivalent to 7.4%)
- Population of Secondary Schools: 40,448 (equivalent to 6.3%)

This implies the GCC benchmarks assume a much higher than existing school populations in the future. On the basis of a dwelling size of 2.35 persons and the existing school population, the following demand for places could be expected for 100 new dwellings.

Table 13 Sensitivity testing of pupil demand

| Primary education                 |                    | Secondary education               |                    |
|-----------------------------------|--------------------|-----------------------------------|--------------------|
| Demand (places per 100 dwellings) | Cost (£ per pupil) | Demand (places per 100 dwellings) | Cost (£ per pupil) |
| 17.4                              | £15,091            | 14.8                              | £23,092            |

<sup>40</sup> Gloucestershire County Council (2019) Current Population of Gloucestershire (Mid-2019) – An Overview. Available: <https://inform.gloucestershire.gov.uk/media/2099157/current-population-of-gloucestershire-overview-2019.pdf>

GCC Education has clarified that the benchmarks in the Local Development Guide do not account for existing capacity at schools and are therefore treated as a maximum in terms of demands and costs, set out in the remainder of this section. The benchmarks in Table 14 are also included to provide a lower baseline and as a form of sensitivity testing.

It is recommended that further work is undertaken to establish a clearer picture on actual requirements for strategic sites, taking account of existing school capacities and the overall school population expected by 2040.

Alongside the discussion for each of the Strategic Allocations is the expectation of GCC Education for development on that site, as set out in their response to the Reg. 18 consultation (received January 2021).

Table 14 sets out an assessment of future primary and secondary school provision required to respond to the growth set out in the Local Plan Review on the basis of the numbers of pupils arising from new development and the costs to provide school places for those pupils. The red text in Table 14 denotes those sites that are not currently proposed to meet the housing needs of Stroud District Council.

The remainder of this chapter sets out the future requirements for each of the strategic and local development sites on a cluster basis, based on both the benchmarks in Table 12 and discussions with GCC Education.

Where demand for additional places arises, it is expected that the strategic development sites will provide infrastructure onsite or off site via S106 contributions. Small sites and those not allocated in the Local Plan would likely fund education infrastructure via CIL payment.

### Stroud Valleys

Based on growth of 640 new homes in the Stroud Valleys cluster, there will be demand for between **an additional 91 and 216 primary school and 77-105 secondary school places**. It is estimated that this would have **a cost of £1.38m-£3.25m for primary, and £1.8m-£2.42m for secondary places**.

The School Places Strategy identifies that expansion would be required to nearby schools as a result of development at Brimscombe Port, however a solution is yet to be identified.

During consultation, GCC Education highlighted that the growth proposed at Minchinhampton should support the expansion of Minchinhampton School up to two forms of entry. Nailsworth Primary School could expand, and contributions will be sought to deliver this.

Table 14 Summary of Primary and Secondary Education Demands and Costs (GCC Benchmarks)

| Ref                     | Site Allocation                              | Ward Cluster       | Housing Delivery to 2040 | Population   | Primary         |                    | Secondary       |                    |
|-------------------------|--|--------------------|--------------------------|--------------|-----------------|--------------------|-----------------|--------------------|
|                         |  |                    |                          |              | Demand (Places) | Cost (£)           | Demand (Places) | Cost (£)           |
| PS24                    | Cam North West (West of Draycott)            | Cam & Dursley      | 900                      | 2115         | 369             | £5,568,579         | 180             | £4,156,560         |
| PS25                    | Cam North East Extension (East of River Cam) | Cam & Dursley      | 180                      | 423          | 73.8            | £1,113,716         | 36              | £831,312           |
| PS28                    | Dursley                                      | Cam & Dursley      | 10                       | 24           | 4.1             | £61,873            | 2               | £46,184            |
| PS19a                   | Stonehouse North West                        | Stonehouse Cluster | 700                      | 1645         | 287             | £4,331,117         | 140             | £3,232,880         |
| PS16 & PS42             | Leonard Stanley                              | Stonehouse Cluster | 40                       | 94           | 16.4            | £247,492           | 8               | £184,736           |
| PS17                    | Stonehouse                                   | Stonehouse Cluster | 10                       | 24           | 4.1             | £61,873            | 2               | £46,184            |
| PS01 & PS02             | Brimscombe & Thrupp                          | Stroud Valleys     | 190                      | 447          | 77.9            | £1,175,589         | 38              | £877,496           |
| PS05                    | Minchinhampton                               | Stroud Valleys     | 80                       | 188          | 32.8            | £494,985           | 16              | £369,472           |
| PS06 & PS07             | Nailsworth                                   | Stroud Valleys     | 90                       | 212          | 36.9            | £556,858           | 18              | £415,656           |
| PS10, PS11, PS12 & PS13 | Stroud                                       | Stroud Valleys     | 165                      | 388          | 67.65           | £1,020,906         | 33              | £762,036           |
| PS34                    | Sharpness Docks                              | Berkeley Cluster   | 300                      | 705          | 123             | £1,856,193         | 60              | £1,385,520         |
| PS36                    | Sharpness (Garden Village)                   | Berkeley Cluster   | 2400                     | 5640         | 984             | £14,849,544        | 480             | £11,084,160        |
| PS37                    | Wisloe (Garden Village)                      | Berkeley Cluster   | 1500                     | 3525         | 615             | £9,280,965         | 300             | £6,927,600         |
| PS33                    | Berkeley                                     | Berkeley Cluster   | 170                      | 400          | 69.7            | £1,051,843         | 34              | £785,128           |
| PS35                    | Newtown & Sharpness                          | Berkeley Cluster   | 70                       | 165          | 28.7            | £433,112           | 14              | £323,288           |
| PS41                    | Painswick                                    | Cotswold Cluster   | 20                       | 47           | 8.2             | £123,746           | 4               | £92,368            |
| G1                      | South of Hardwicke                           | Gloucester Fringe  | 1350                     | 3173         | 553.5           | £8,352,869         | 270             | £6,234,840         |
| PS30                    | Hunts Grove Extension                        | Gloucester Fringe  | 750                      | 1763         | 307.5           | £4,640,483         | 150             | £3,463,800         |
| HAR017                  | Hardwicke                                    | Gloucester Fringe  | 10                       | 24           | 4.1             | £61,873            | 2               | £46,184            |
| G2                      | Land at Whaddon                              | Gloucester Fringe  | 3000                     | 7050         | 1230            | £18,561,930        | 600             | £13,855,200        |
| PS44                    | Frampton-on-Severn                           | The Severn Vale    | 30                       | 71           | 12.3            | £185,619           | 6               | £138,552           |
| PS45 & PS46             | Whitminster                                  | The Severn Vale    | 50                       | 118          | 20.5            | £309,366           | 10              | £230,920           |
| PS38                    | Kingswood                                    | The Wotton Cluster | 50                       | 118          | 20.5            | £309,366           | 10              | £230,920           |
| <b>TOTAL</b>            |  |                    | <b>12065</b>             | <b>28353</b> | <b>4947</b>     | <b>£74,649,895</b> | <b>2413</b>     | <b>£55,720,996</b> |





Table 15 Summary of Primary and Secondary Education Demands and Costs (Sensitivity testing based on population data)

| Ref                     | Site Allocation                              | Ward Cluster       | Housing Delivery to 2040 | Population   | Primary         |             | Secondary       |                |
|-------------------------|--|--------------------|--------------------------|--------------|-----------------|-------------|-----------------|----------------|
|                         |  |                    |                          |              | Demand (Places) | Cost (£)    | Demand (Places) | Cost (£)       |
| PS24                    | Cam North West (West of Draycott)            | Cam & Dursley      | 900                      | 2115         | 156.5           | £2,361,892  | 133.2           | £3,076,894     |
| PS25                    | Cam North East Extension (East of River Cam) | Cam & Dursley      | 180                      | 423          | 31.3            | £472,378    | 26.6            | £615,379       |
| PS28                    | Dursley                                      | Cam & Dursley      | 10                       | 24           | 1.7             | £26,243     | 1.5             | £34,188        |
| PS19a                   | Stonehouse North West                        | Stonehouse Cluster | 700                      | 1645         | 121.7           | £1,837,027  | 103.6           | £2,393,139     |
| PS16 & PS42             | Leonard Stanley                              | Stonehouse Cluster | 40                       | 94           | 7.0             | £104,973    | 5.9             | £136,751       |
| PS17                    | Stonehouse                                   | Stonehouse Cluster | 10                       | 24           | 1.7             | £26,243     | 1.5             | £34,188        |
| PS01 & PS02             | Brimscombe & Thrupp                          | Stroud Valleys     | 190                      | 447          | 33.0            | £498,622    | 28.1            | £649,566       |
| PS05                    | Minchinhampton                               | Stroud Valleys     | 80                       | 188          | 13.9            | £209,946    | 11.8            | £273,502       |
| PS06 & PS07             | Nailsworth                                   | Stroud Valleys     | 90                       | 212          | 15.7            | £236,189    | 13.3            | £307,689       |
| PS10, PS11, PS12 & PS13 | Stroud                                       | Stroud Valleys     | 165                      | 388          | 28.7            | £433,014    | 24.4            | £564,097       |
| PS34                    | Sharpness Docks                              | Berkeley Cluster   | 300                      | 705          | 52.2            | £787,297    | 44.4            | £1,025,631     |
| PS36                    | Sharpness (Garden Village)                   | Berkeley Cluster   | 2400                     | 5640         | 417.4           | £6,298,380  | 355.3           | £8,205,049     |
| PS37                    | Wisloe (Garden Village)                      | Berkeley Cluster   | 1500                     | 3525         | 260.9           | £3,936,487  | 222.1           | £5,128,156     |
| PS33                    | Berkeley                                     | Berkeley Cluster   | 170                      | 400          | 29.6            | £446,135    | 25.2            | £581,191       |
| PS35                    | Newtown & Sharpness                          | Berkeley Cluster   | 70                       | 165          | 12.2            | £183,703    | 10.4            | £239,314       |
| PS41                    | Painswick                                    | Cotswold Cluster   | 20                       | 47           | 3.5             | £52,486     | 3.0             | £68,375        |
| G1                      | South of Hardwicke                           | Gloucester Fringe  | 1350                     | 3173         | 234.8           | £3,542,839  | 199.9           | £4,615,340     |
| PS30                    | Hunts Grove Extension                        | Gloucester Fringe  | 750                      | 1763         | 130.4           | £1,968,244  | 111.0           | £2,564,078     |
| HAR017                  | Hardwicke                                    | Gloucester Fringe  | 10                       | 24           | 1.7             | £26,243     | 1.5             | £34,188        |
| G2                      | Land at Whaddon                              | Gloucester Fringe  | 3000                     | 7050         | 521.7           | £7,872,975  | 444.2           | £10,256,312    |
| PS44                    | Frampton-on-Severn                           | The Severn Vale    | 30                       | 71           | 5.2             | £78,730     | 4.4             | £102,563       |
| PS45 & PS46             | Whitminster                                  | The Severn Vale    | 50                       | 118          | 8.7             | £131,216    | 7.4             | £170,939       |
| PS38                    | Kingswood                                    | The Wotton Cluster | 50                       | 118          | 8.7             | £131,216    | 7.4             | £170,939       |
| <b>TOTAL</b>            |  |                    | <b>12065</b>             | <b>28353</b> | 2098            | £31,662,479 | 1786            | £41,247,467.29 |

## The Stonehouse Cluster

The proposed strategic and local development sites, totalling 750 homes, within the Pre-submission Draft Local Plan would create **demand for 130-308 primary and 111-150 secondary school places**. This would be at a **cost of £1.97m-£4.64m and £2.56m-£3.46m** respectively.

The Schools Places Strategy outlines that there is likely to be a significant shortfall in school places for primary provision in the near future in the Stonehouse Cluster, with an estimated 6% and 14% overcapacity in years 2021/22 and 2022/23 respectively.

It is expected that a new primary school will need to be provided at the proposed Northwest of Stonehouse strategic development site (ref. PS19a) in the short to medium-term to support new housing development. GCC Education estimate this would need to be a contribution equivalent to a single form of entry on a 2ha site, with GCC funding the increase to 1.5 form of entry to address wider demands in Stonehouse.

There is limited scope to develop the Leonard Stanley and King's Stanley primary schools, so a new school in the Stonehouse Cluster will be vital in responding to growth.

## Cam & Dursley

The Pre-submission Draft Local Plan allocates land for a total of 1090 homes. It is estimated that this would create **demand for 189-447 primary school places at a cost of between £2.86m and £6.74m**. There would be **demand for 166-218 secondary school places at a cost of £3.73-£5.03m**.

A financial contribution has been secured by GCC Education to support the housing development at the former Lister Petter site in Dursley. This would require Dursley C of E Primary Academy to expand by 0.5FE in 2020 to meet the rise in demand for school places that this development would generate.

The application of up to 450 dwellings at North East Cam is expected to provide a contribution towards additional primary school places in the area, however there are limited options to expand Dursley C of E Primary Academy following its recent expansion.

The strategic development site at North West Cam would create the need for a new one form of entry primary school.

GCC Education has raised concerns that development at Wisloe and more widely in the adjacent Berkeley Cluster could result in significant demand for places at Cam. On-site provision and contributions towards expanding school provision in the Berkeley Cluster are therefore required to reduce pressure on Cam's schools.

## The Gloucester Fringe

Including the proposed strategic development location at Whaddon, it is estimated that the proposed 5,110 dwellings in the Gloucester Fringe would create demand for **889-2,095 primary school places at a cost of £13.41-£31.62m**. There would be demand for **756-1022 secondary school places at a cost of circa £17.47m-£23.6m**.

S.106 contributions or CIL payments will be sought from developments in the Gloucester Fringe area to expanding existing schools. GCC Education has highlighted that a further expansion of Beaufort Academy in Gloucester may be an option, but that there is no scope to expand Severn Vale School further.

Given the large quantities of housing in and around Gloucester associated with the growth set out both in the Stroud Local Plan and the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy, there could be sufficient demand to support the provision of a new secondary school in the Gloucester area, however a solution is yet to be identified.

It is expected that pupils arising from the Land at Whaddon site would be catered for by a new primary school onsite. A s.106 contribution has been secured for the expansion of Tuffley Primary School in Gloucester and further scope for increasing capacity would be limited.

In terms of secondary provision, a new site for a secondary school / free school will be sought on either the Whaddon or Hardwicke sites, with up to a six form of entry school on an 8.5ha site required.

The existing Hunts Grove Primary Academy, which opened in 2019, is already approaching capacity. The further strategic development site planned at Hunts

Grove will require a new primary school to support pupils arising from the development.

### The Berkeley Cluster

The Pre-submission Draft Local Plan allocates a total of 4,440 homes within the Berkeley Cluster. Using GCC Education benchmarks, it is estimated that there would be **demand for approximately 772-1,820 primary school places in the Cluster at a cost of £11.65m-£27.47m** resulting from development. There would be **a need for circa 657-888 secondary school places at a cost of £15.18-£20.51m.**

Recently, demand from smaller developments and demographic growth has required that Slimbridge Primary School opens a fifth classroom to support an increase in admissions per intake from 15 to 20.

The School Places Strategy sets out that Slimbridge Primary School would likely be affected by growth at Wisloe and a number of developments at Cam may affect numbers at Slimbridge as it is technically the nearest school, however poor walking routes may deter parents and impact the Cam schools instead.

The above demonstrates the importance of providing an additional primary school at Wisloe, where it is expected that a three form of entry primary school would be provided onsite.

At Secondary School level, it is anticipated that a new secondary school or all-through school would be provided at the Sharpness new settlement. This would likely need to include six forms of entry at primary level and four forms of entry at secondary level.

Developer contributions via s.106 agreement or CIL payment would be required to address additional demand for secondary education elsewhere in the cluster.

### The Severn Vale

There are relatively low levels of growth proposed within the Severn Vale Cluster, resulting in **demand for an additional circa 14-33 primary school**

**places and circa 12-16 secondary school places at a cost of roughly £210,000-£495,000 and £274,000-£369,000** respectively.

Concerns have been raised by GCC Education that the Lakefield Primary School would not be able to expand further, so new pupils would likely have to attend Whitminster, where developer contributions via s106 agreement or CIL payment could support an increase in pupil admissions to approximately 30 per intake.

### The Wotton Cluster

The allocation of 50 homes at Kingswood would create **demand for around 9-21 additional primary school places at a cost of £131,000-£310,000.** There would be **demand for an additional 8-10 secondary school places at a cost of around £171,000-£230,900.**

As set out earlier in this chapter, there are existing capacity issues at Kingswood Primary School. A temporary solution is proposed to address an existing lack of capacity; however, an alternative solution would need to be found in the longer term.

There is generally capacity at other primary schools elsewhere in the cluster. Contributions via s.106 agreement or CIL payment would be sought for increases in capacity at secondary schools.

### The Cotswold Cluster

The one local development site at Painswick would create demand for **four to eight primary school places at a cost of approximately £53,000-£123,800.** There would be demand for an additional **three to four secondary school places at a cost of around £68,000-£92,400.**

GCC Education has stated that there is sufficient scope for the Croft Primary School in Painswick to expand onsite using developer contributions, most likely to be in the form of CIL payment.

## Further Education

GCC Education has provided the benchmark set out within Table 16 below, which sets out that every 100 homes create demand for 11 further education (post-16) places.

Table 16 Demand and costs for further education places (GCC Education, 2020<sup>41</sup>)

| Further education                 |                    |
|-----------------------------------|--------------------|
| Demand (Places per 100 dwellings) | Cost (£ per pupil) |
| 11                                | £23,092            |

The demands and costs for further education places associated with the growth set out in the Local Plan Review are outlined within Table 17 overleaf.

Where development is likely to have an impact upon one of the six institutions identified within the Assessment of Current Infrastructure section of this chapter, it is expected that financial contributions will be provided in accordance with the above benchmarks and secured alongside other contributions towards education. It is expected that contributions will be secured via s.106 agreement on larger allocated sites, whilst small sites will receive infrastructure funding via CIL.

The growth set out in the Local Plan Review is likely to generate **demand for an additional 1,482 further education places**. It is expected that this would **cost approximately £34.23m**. The areas with the highest demand for further education places are likely to be the Berkeley Cluster and Gloucester Fringe, where an additional 483 and 490 places are anticipated to be required.

On the basis of discussions with GCC Education, there is potentially a need to provide a sixth form within a new secondary school at the Sharpness Garden Village. Elsewhere in the district, it is expected that contributions would be made to improve existing provision.

The new secondary school within the Gloucester Fringe or surrounding area would be expected to provide some post-16 facilities.

<sup>41</sup> Gloucestershire County Council IDP Consultation Response (April 2020)

Table 17 Summary of Further Education Demands and Costs

| Ref                     | Site Allocation                              | Ward Cluster                 | Housing Delivery to 2040 | Population   | Post-16         |                       |
|-------------------------|--|------------------------------|--------------------------|--------------|-----------------|-----------------------|
|                         |  |                              |                          |              | Demand (Places) | Cost (£)              |
| PS24                    | Cam North West (West of Draycott)            | Cam & Dursley                | 900                      | 2115         | 99              | £2,286,108            |
| PS25                    | Cam North East Extension (East of River Cam) | Cam & Dursley                | 180                      | 423          | 20              | £457,222              |
| PS28                    | Dursley                                      | Cam & Dursley                | 10                       | 24           | 1               | £25,401               |
| PS19a                   | Stonehouse North West                        | Stonehouse Cluster           | 700                      | 1645         | 77              | £1,778,084            |
| PS16 & PS42             | Leonard Stanley                              | Stonehouse Cluster           | 40                       | 94           | 4               | £101,605              |
| PS17                    | Stonehouse                                   | Stonehouse Cluster           | 10                       | 24           | 1               | £25,401               |
| PS01 & PS02             | Brimscombe & Thrupp                          | Stroud Valleys               | 190                      | 447          | 21              | £482,623              |
| PS05                    | Minchinhampton                               | Stroud Valleys               | 80                       | 188          | 9               | £203,210              |
| PS06 & PS07             | Nailsworth                                   | Stroud Valleys               | 90                       | 212          | 10              | £228,611              |
| PS10, PS11, PS12 & PS13 | Stroud                                       | Stroud Valleys               | 165                      | 388          | 18              | £419,120              |
| PS34                    | Sharpness Docks                              | The Berkeley Cluster         | 300                      | 705          | 33              | £762,036              |
| PS36                    | Sharpness (Garden Village)                   | The Berkeley Cluster         | 2400                     | 5640         | 264             | £6,096,288            |
| PS37                    | Wisloe (Garden Village)                      | The Berkeley Cluster         | 1500                     | 3525         | 165             | £3,810,180            |
| PS33                    | Berkeley                                     | The Berkeley Cluster         | 170                      | 400          | 19              | £431,820              |
| PS35                    | Newtown & Sharpness                          | The Berkeley Cluster         | 70                       | 165          | 8               | £177,808              |
| PS41                    | Painswick                                    | The Cotswold Cluster         | 20                       | 47           | 2               | £50,802               |
| G1                      | South of Hardwicke                           | The Gloucester Fringe        | 1350                     | 3173         | 149             | £3,429,162            |
| PS30                    | Hunts Grove Extension                        | The Gloucester Fringe        | 750                      | 1763         | 83              | £1,905,090            |
| HAR017                  | Hardwicke                                    | The Gloucester Fringe        | 10                       | 24           | 1               | £25,401               |
| <b>G2</b>               | <b>Land at Whaddon</b>                       | <b>The Gloucester Fringe</b> | <b>3000</b>              | <b>7050</b>  | 330             | £7,620,360            |
| PS44                    | Frampton-on-Severn                           | The Severn Vale              | 30                       | 71           | 3               | £76,204               |
| PS45 & PS46             | Whitminster                                  | The Severn Vale              | 50                       | 118          | 6               | £127,006              |
| PS38                    | Kingswood                                    | The Wotton Cluster           | 50                       | 118          | 6               | £127,006              |
| <b>TOTAL</b>            |  |                              | <b>12065</b>             | <b>28353</b> | <b>1327</b>     | <b>£30,646,547.80</b> |

## Sector-specific Funding

The 2019 changes to the CIL regulations and the removal of the pooling restrictions for s.106 agreements have created a broader scope within which GCC Education can secure funding to mitigate development impacts.

These contributions should be used alongside central government basic need grant, the DfE free schools programme and other capital funding to respond to the growth set out in the Local Plan Review.

The Department for Education has developed a new pilot initiative; Developer Loans for Schools, which acts a bridging loan for those developers which may be unable to forward-fund delivery of schools to respond to increases in demand. This will help to ensure the timely delivery of infrastructure without detrimentally impacting cashflow for housing developers in the short-term and aims to help accelerate housing delivery.

This forward-funding approach is subject to approval of a business case by the Department for Education but includes offering housing developers loans of up to £20 million to deliver schools earlier in a development than would have been possible otherwise.

## Conclusions

On the basis of the benchmarks provided by GCC Education, the proposed growth set out in the Local Plan Review would have significant implications for the education sector in and around Stroud District.

It is recommended that GCC Education is consulted on all major residential applications (over 10 dwellings) to provide site-specific commentary and engage with developers in mitigating the impacts of developments.

It is estimated that the growth would require approximately 4000 early years places, a range of between 2100 and 5500 primary school places, 1800-2700 secondary school places and approximately 1500 further education places at a total cost of £158m-£215.6m.

It is expected that all strategic development sites of around 500 homes and above will provide a primary school onsite, unless site-specific constraints or local needs require otherwise. S.106 contributions will be sought on strategic development sites allocated in the plan, whilst smaller sites and windfall development would provide infrastructure funding for education via CIL.

There is the need for a new secondary school at Sharpness and a site is being sought in the area surrounding Gloucester to respond to strategic-level growth set out in both the Stroud Local Plan Review and in the Joint Core Strategy area.



## 7 Infrastructure Assessment: Health and Social Care

### Responsibility for delivery

Delivery of healthcare services and infrastructure in Stroud is divided between four organisations within Gloucestershire, and the NHS. Healthcare is divided into primary care, secondary care, and tertiary care. Primary care is often the first point of contact for people in need of healthcare, and may be provided by professionals such as GPs, dentists and pharmacists. Secondary care is sometimes referred to as 'hospital and community care', whilst Tertiary care typically refers to highly specialised treatment and mental health services.

Table 18 Responsibilities for Delivery

| Service Provider   | Responsibility   |
|--|--|
| <b>NHS England</b>   | Responsibility for the delivery of primary healthcare services falls within NHS England's remit.   |
| <b>NHS Property Services Ltd</b>                             | NHS Property Services is responsible for the ownership and management of the parts of the former Primary Care Trust estate that were not transferred to NHS community care providers as part of the Health and Social Care Act.  |
| <b>Gloucestershire Clinical Commissioning Group (CCG)</b>    | The CCG is responsible for commissioning primary healthcare services, including GP services, across the County. Individual GP surgeries, or occasionally groups of surgeries are maintained and managed as separate businesses.  |
| <b>Gloucestershire Hospitals NHS Foundation Trust (GHFT)</b> | The principal acute healthcare provider for Gloucestershire county is the GHT, which provides county-wide acute hospital services from two large district general hospitals; Cheltenham General Hospital and Gloucestershire Royal Hospital. Whilst both these sites are outside of Stroud, their catchment extends into the District where they also provide maternity services at Stroud Maternity Hospital... |

Responsibilities for Delivery (continued)

| Service Provider  | Responsibility  |
|---|---|
| <b>Gloucestershire Health and Care NHS Foundation Trust (GHC)</b> | The Health and Care Trust is responsible for the provision of community and mental healthcare and learning disability services across Gloucestershire. The Trusts runs services at Stroud General Hospital, Berkeley House, Park House and Weavers Croft, all in Stroud and services at the Tynedale Day Centre and Vale Community Hospital, both in Dursley.   |
| <b>Gloucestershire Health and Wellbeing Board</b>                 | The Health and Wellbeing Board is part of Gloucestershire County Council. It included elected Members, leaders from the NHS, social care, police and the voluntary and community sector with the aim of improving the health and wellbeing of the local population and reduce health inequalities. The board's responsibilities include oversight of the Joint Strategic Needs Assessment (JSNA) and a duty to produce a Joint Health and Wellbeing Strategy. |

### Overview of progress since the 2014 IDP

#### Literature, Policy and Strategy Changes

**The Stroud District IDP Refresh (2014):** The 2014 IDP defined a baseline of a total of 16 GP surgeries within the district, along with 19 dentist surgeries. An additional doctors' surgery was planned as part of the Hunt's Grove Site Allocation. Two projects were identified to improve existing surgeries at Minchinhampton (relocation) and Uley (expansion).

Using NHS benchmarks, the IDP estimated that the total cost of providing the necessary healthcare facilities to respond to the growth set out in the Stroud Local Plan would be between £6.84-7.33m. At that time, a total of circa £470,000 of existing funding was identified.

It was predicted that planned development in Stroud District would generate demand for approximately an additional 30 acute hospital bed spaces. It was expected that these would be provided at Cheltenham General Hospital and Gloucestershire Royal Hospital but highlighted that the growth within the Stroud Local Plan could put pressure on acute bed space capacity.

In terms of secondary healthcare, 92% of bed spaces were considered to be occupied on average, which was above the national average of 86%. No community, mental health, maternity or acute hospital projects were identified as part of the 2014 IDP.

### Changes since 2014 IDP: Overarching Documents

**Revised National Planning Policy Framework (2019)<sup>42</sup>:** The NPPF is underpinned by the principles of sustainable development, including the objective to ‘support strong, vibrant and healthy communities’ (Paragraph 8). Specifically, the NPPF requires planning policies and decisions (Paragraph 91) to enable and support healthy lifestyles.

To provide the social, recreation and cultural facilities and services the community needs, planning policies should plan positively for the provision and use of community facilities [such as health and social care facilities] and guard against the unnecessary loss of valued facilities and services and ensure that established facilities and services are able to develop and modernise and are retained for the benefit of the community (NPPF Paragraph 92).

**Gloucestershire Integrated Care System – One Gloucestershire (2018)<sup>43</sup>:** One Gloucestershire is a partnership of seven organisations including the County Council, the CCG, NHS Trusts and primary care providers. It was one of only 14 Integrated Care Systems (ICS) across England when formed in 2018 and aims to join up health and social care delivery across the county. The ICS aims to promote prevention and self-care, providing care at home and in the community, a developing specialist services at Centres of Excellence, such as Gloucester Royal Hospital and Cheltenham General Hospital.

**Gloucestershire Health and Wellbeing Strategy: Fit for the Future (2012-2032)<sup>44</sup>:** The aim of the Health and Wellbeing Strategy is to consider the needs

of people within Gloucestershire throughout their life, addressing issues created by health and wealth inequalities.

Key issues identified within the Strategy include Gloucestershire’s ageing population and health inequalities between different areas within the county.

**Gloucestershire Joint Health and Wellbeing Strategy (2019-2030)<sup>45</sup>:** The updated Joint Health and Wellbeing Strategy outlines the health and wellbeing needs of Gloucestershire and key priorities to reduce inequalities.

To deliver the Strategy’s vision of Gloucestershire being a place where everyone can live well, be healthy and thrive, key priorities are identified. These priorities include improving the quality, affordability and suitability of housing in Gloucestershire to help tackle health inequalities.

**Stroud District Local Plan Review – Pre-submission Draft Plan, Stroud District Council (2021)<sup>46</sup>:** The Pre-submission Draft Local Plan identifies ‘healthcare for all residents’ as a key element of the Plan’s strategic objective ‘Accessible communities’. The Pre-submission Draft Local Plan promotes the health and wellbeing of Stroud’s communities and seeks to work with others to deliver the public health agenda.

Policies CP5 and CP8 require that new housing development has community facilities, such as healthcare services, which are appropriate to the development site and its surroundings. On major sites, it highlights that community facilities will be required onsite.

Policy CP2 ‘Strategic growth and development locations’ identifies a target of 650 additional care home bed spaces to meet the needs of Stroud District for the period 2020-2040.

### Changes since 2014 IDP: Primary Care

<sup>42</sup> National Planning Policy Framework (2019) [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/810197/NPPF\\_Feb\\_2019\\_revised.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf)

<sup>43</sup> One Gloucestershire (2019) Integrated Care System. Available: <https://www.onegloucestershire.net/who-we-are/>

<sup>44</sup> Gloucestershire Health and Wellbeing Board (2013) Gloucestershire Health and Wellbeing Strategy 2012-2032: Fit for The Future. Available: [glostext.gloucestershire.gov.uk/documents/s18883/Joint%20HWBS.pdf](http://glostext.gloucestershire.gov.uk/documents/s18883/Joint%20HWBS.pdf)

<sup>45</sup> Gloucestershire County Council (2019) Gloucestershire Joint Health and Wellbeing Strategy – Summary Version 2019-2030. Available: [https://www.gloucestershire.gov.uk/media/2091568/gcc\\_2596-joint-health-and-wellbeing-strategy-summary-version\\_dev2.pdf](https://www.gloucestershire.gov.uk/media/2091568/gcc_2596-joint-health-and-wellbeing-strategy-summary-version_dev2.pdf)

<sup>46</sup> Stroud District Council (201) Stroud District Local Plan Review – Pre-submission Draft Plan. Available: <https://www.stroud.gov.uk/environment/planning-and-building-control/planning-strategy/stroud-district-local-plan-review>

**NHS England Primary Care Networks (2019):** To meet the needs associated with increased demand on community, mental health, social care and hospital services, NHS England, through its Operational Planning and Contracting Guidance 2019/20, established 1,250 Primary Care Networks in July 2019. These networks are intended to share knowledge and resources between GP surgeries, community hospitals and pharmacies to deliver efficiencies and improve care to the public.

14 primary care networks have been set up across Gloucestershire, including three covering Stroud District; Berkeley Vale, Stroud Cotswolds and Severn Vale.

**Gloucestershire CCG Primary Care Infrastructure Plan 2019 to 2026:** The updated Primary Care Infrastructure Plan (PCIP) considers where investment is anticipated to be made in new or extended primary healthcare facilities in the context of NHS policy development, housing growth and population changes.

It outlines the challenges of the existing estate in providing an environment for staff to provide the best care, whilst maximising efficiency of use and delivering value for money.

It considers the condition and suitability of the 74 existing GP practices across Gloucester and highlights that 60% of the buildings are owned by the GP practices, with the remainder leased, often from NHS Property Services. A summary of the identified infrastructure in the Stroud & Berkeley Vale district is provided in the Assessment of Current Infrastructure Provision.

The Plan sets out where investment is anticipated to be made in either new or extended buildings to enhance the practice team and patient environment supporting modern healthcare. It identifies that buildings will need to be developed in a flexible way to consider future demand, new technology, and the bringing together of other community, care or leisure services.

<sup>47</sup> Gloucestershire Health and Care Trust (2017) Operational Plan 2017/18 and 2018/19. Available: <https://www.ghc.nhs.uk/our-operational-plan/>

<sup>48</sup> NHS England (2019) Operational Planning and Contracting Guidance 2020/21. Available: <https://www.england.nhs.uk/operational-planning-and-contracting/>

Consideration of the ongoing delivery and future priorities for the CCG is summarised within the Planned Provision section of this chapter.

### Changes since 2014 IDP: Secondary and Tertiary Care

**2gether NHS Foundation Trust Operation Plan 2017/18 and 2018/19<sup>47</sup>:** The Operational Plan outlines a commitment to improve the quality of the services provided and ensure the sustainability of services of the trust in the long term.

The aim of the Operational Plan is to achieve the aims and objectives of Gloucestershire's Sustainability and Transformation Plan (STP) as outlined in the NHS Operational Planning and Contracting Guidance 2020/2021<sup>48</sup>.

The Trust has made substantial investments in developing high quality accommodation. The Operational Plan and STP acts as a catalyst to use existing estate more efficiently and dispose of unrequired property.

Gloucestershire Health and Care NHS Foundation Trust was formed in October 2019, following the merger of 2gether NHS Foundation Trust and Gloucestershire Care Services NHS Trust.

**Gloucestershire Hospitals NHS Foundation Trust Strategic Plan 2019-2024<sup>49</sup>:** The Strategic Plan defines the context within which the Foundation Trust operates, and the challenges expected to be faced. The redesign and modernisation of estate managed by the Foundation Trust is identified as an aim to ensure patients receive the best care possible in Gloucestershire.

An 'Estates Strategy' has been developed within the Strategy to contribute towards this aim. The Estates Strategy describes how the Foundation Trust intends to respond to planned and anticipated changes in activity, efficiency, models of care, ways of working and demographics in consideration of estate and infrastructure.

<sup>49</sup> Gloucestershire Hospitals NHS Foundation Trust (2019) Strategic Plan 2019-2024. Available: <https://www.gloshospitals.nhs.uk/about-us/reports-and-publications/strategic-plan-20192024/>

‘Effective estate’ is a strategic objective identified in the Strategic Plan. This objective outlines how the Trust has developed its estate and is working with local health and social care partners to ensure services are accessible and delivered from facilities that enable the Strategic Plan’s objectives.

The Strategy identifies developing clinical centres of excellence, providing integrated models of healthcare, investing in technology and the Trust’s estate and providing financial sustainability as key aims.

## Scheme and Project Delivery

### Schemes since 2014: Primary Care

The following projects were identified through consultation with the CCG in April 2020 and through the Primary Care Infrastructure Plan 2019/2026:

- **Culverhay Surgery, Wotton-under-Edge:** A £500,000 improvement and refurbishment of the existing surgery building was completed in May 2018.
- **The Kingsway Medical Centre, Gloucester<sup>50</sup>:** A £3.8m new surgery on the southern fringe of Gloucester opened in December 2018 and will eventually cater for up to 13,000 patients. The CCG anticipate residents of the Hunts Grove urban extension to register here as patients;
- **Chipping Surgery, Wotton under Edge:** A substantial extension is currently being constructed and due to be completed sometime in 2020. It is proposed to respond to housing growth in both Stroud and South Gloucestershire;
- **Minchinhampton Surgery:** The CCG has approved the business case for a new surgery for Minchinhampton to serve up to 9,000 patients at Vosper Field. Building work has not yet started and is still subject to local authority planning; and;
- **Stroud King Street Surgery:** Business case approved, and planning permission granted for a new Town Centre development in Stroud for the

Locking Hill and Stroud Valleys Family practices. Due to start by September 2020.

### Schemes since 2014: Secondary and Tertiary Care

- **Strategic Site Development Fund:** £40m of funding was awarded from NHS England for improvements to Gloucester Royal Hospital and Cheltenham General Hospital. The projects included within this fund were: reconfiguration and improvement to the emergency department; development of an acute medical unit; refurbishment of the decant/escalation ward at Gloucester Royal; and the development of Cheltenham General as a Centre of Excellence.

## Assessment of Current Infrastructure Provision

### Overview

This section outlines the existing healthcare estate across the primary, secondary and tertiary care sectors, as well as the numbers of care homes, in Stroud. The information has been gathered from the CCG’s Primary Care Infrastructure Plan<sup>51</sup> and the Care Quality Commission’s healthcare search facility<sup>52</sup>.

Floorspace figures for GP surgeries are drawn from the PCIP and also includes the CCG’s own assessment of whether the quantum of floorspace is sufficient for the number of GPs and patients.

### The Stroud Valleys

#### Primary Care

Table 19 sets out the current provision of GP surgeries within The Stroud Valleys Parish Cluster. It includes actual population (patient numbers), current

<sup>50</sup> <https://www.gloucestershireccg.nhs.uk/new-3-8m-kingsway-health-centre-welcomes-patients/>

<sup>51</sup> Appendix 1A Primary Care Infrastructure Plan 2016 to 2021 <https://www.gloucestershireccg.nhs.uk/wp-content/uploads/2017/01/G-Primary-Care-Infrastructure-Plan-2016-to-2021.pdf>

<sup>52</sup> Care Quality Commission (2020) Healthcare search. Available: <https://www.cqc.org.uk/what-we-do/services-we-regulate/find-healthcare-clinic>

floorspace (GIA) and the gap in current provision of service (sqm), as assessed in Appendix 1 of the Primary Care Infrastructure Plan 2019/2026.

Table 19 Stroud Valley GP Spatial Assessment

| Practice                          | Actual Population at April 2015 | Current GIA | Size Allowance | Gap in current provision (sqm) |
|-----------------------------------|---------------------------------|-------------|----------------|--------------------------------|
| Minchinhampton Surgery            | 7,172                           | 340         | 667            | -326                           |
| Rowcroft Medical Centre           | 11,593                          | 553         | 916            | -313                           |
| The Health Centre (Beeches Green) | 7,866                           | 411         | 667            | -245                           |
| Frithwood Surgery                 | 6,606                           | 390         | 584            | -194                           |
| Stroud Valley Family Practice     | 4,093                           | 295         | 417            | -122                           |
| Walnut Tree Practice              | 4,671                           | 326         | 417            | -92                            |
| Prices Mill Surgery               | 8,521                           | 713         | 750            | -37                            |

Dentists within The Stroud Valleys are all delivered by private businesses. Table 19 sets out The Stroud Valleys dental care provision including number of dentists, the provider and most recent Care Quality Commission (CQC) Rating.

Table 20 Stroud Valley Dental Care Provision<sup>53</sup>

| Dental Practice                          | Dentists (no of Staff) | Other Staff inc. Hygienists, orthodontists and dental nurses | Provider                      | CQC Rating   |
|--|------------------------|--|-------------------------------|--|
| Minchinhampton Dental Practice           | Not Available          | Not Available  | Minch Dent Ltd                | This service has not yet been inspected.   |
| Spinghill House Dental Surgery           | 1                      | 3 full time 'other staff' and additional reception staff     | Miss Ruth Evans               | Provider met the relevant standards.   |
| Fourways Dental Surgery                  | 5                      | 10   | Fourways Dental Surgery       | CQC found that the practice was providing well-led care in accordance with the relevant regulations. |
| Brockley House Dental Surgery            | 7                      | 11   | Brockley House Dental Surgery | The surgery achieved five out of the five questions of service asked by the CQC.                     |
| Confident Dental & Implant Clinic Stroud | Not Available          | Not Available  | Stroud Smile Limited          | This service has not yet been inspected.   |

<sup>53</sup> Care Quality Commission  
[https://www.cqc.org.uk/search/site/stroud?sort=default&distance=15&mode=html&f%5B0%5D=im\\_field\\_popular\\_services%3A3670](https://www.cqc.org.uk/search/site/stroud?sort=default&distance=15&mode=html&f%5B0%5D=im_field_popular_services%3A3670)

| Dental Practice        | Dentists (no of Staff) | Other Staff inc. Hygienists, orthodontists and dental nurses | Provider                   | CQC Rating                              |
|------------------------|------------------------|--|----------------------------|---|
| Rowcroft Dental Centre | Not Available          | Not Available  | Rowcroft Dental Centre Ltd | This service has not yet been inspected |

### Secondary and Tertiary Care

Stroud General Hospital is the sole community hospital within the Stroud Valleys Cluster. Following a merger of mental and physical services as part of the Health and Care Trust, the hospital now incorporates four main buildings as part of a ‘campus’ including: Stroud General Hospital, Stroud Maternity Hospital, Park House Hospital and Weavers Croft.

The Stroud Hospital campus includes inpatient wards, a minor injuries unit, maternity facilities, diagnostic facilities, occupational therapy and physiotherapy teams, mental health and learning disability services, endoscopy services, day theatre services and a range of outpatient clinics.

### Social Care

There is a total of 50 registered care homes across the Stroud District and there are 26 in The Stroud Valleys cluster. Of the 26 registered care homes within the area, only one is provided by Gloucestershire County Council: Longhouse in Cainscross. The remainder are led by private businesses.

Longhouse provides accommodation for persons who require nursing or personal care, for those with learning disabilities and autism. It was CQC rated as ‘Good’ in 2017<sup>54</sup>.

<sup>54</sup> Care Quality Commission 2017: <https://www.cqc.org.uk/location/1-115336951>

<sup>55</sup> Appendix 1A Primary Care Infrastructure Plan 2016 to 2021 <https://www.gloucestershireccg.nhs.uk/wp-content/uploads/2017/01/G-Primary-Care-Infrastructure-Plan-2016-to-2021.pdf>

## The Stonehouse Cluster

### Primary Care

Table 21 set out the current provision of GPs within The Stonehouse Cluster, including actual population, current GIA and the gap in current provision of service (sqm).

Table 21 The Stonehouse Cluster GP Spatial Assessment<sup>55</sup>

| Practice                       | Actual Population at April 2015 | Current GIA | Size Allowance | Gap in current provision (sqm) |
|--------------------------------|---------------------------------|-------------|----------------|--------------------------------|
| The High Street Medical Centre | 5,628                           | 336         | 500            | -164                           |
| Stonehouse Health Clinic       | 2,371                           | 120         | 266            | -146                           |
| Regent Street Surgery          | 4,115                           | 195         | 417            | -222                           |

Table 22 sets out The Stonehouse Cluster dental care provision including number of dentists, the provider and most recent Care Quality Commission (CQC) Rating.

Table 22 The Stonehouse Cluster Dental Care Provision<sup>56</sup>

| Dental Practice                     | Dentists (no of Staff) | Other Staff inc. Hygienists, orthodontists and dental nurses | Provider               | CQC Rating   |
|-------------------------------------|------------------------|--|------------------------|--|
| HRS Dentalcare Limited (Stonehouse) | Not Available          | Not Available  | HRS Dentalcare Limited | This service achieved five out of the five standards |

<sup>56</sup> Care Quality Commission

[https://www.cqc.org.uk/search/site/stroud?sort=default&distance=15&mode=html&f%5B0%5D=im\\_field\\_popular\\_services%3A3670](https://www.cqc.org.uk/search/site/stroud?sort=default&distance=15&mode=html&f%5B0%5D=im_field_popular_services%3A3670)



| Dental Practice  | Dentists (no of Staff) | Other Staff inc. Hygienists, orthodontists and dental nurses | Provider                        | CQC Rating   |
|--|------------------------|--|---------------------------------|--|
|  |                        |  |                                 | assessed as part of the inspection.  |
| Townes & Townes Associates Dental Surgeons (Stonehouse)            | 2                      | 4  | Drs Philip & Barbara Townes BDS | The surgery achieved five out of the five questions of service asked by the CQC. |
| High Street Dental Practice & Cotswold Implant Centre (Stonehouse) | Not Available          | Not Available  | Dr Torjus Baalack               | This service has not yet been inspected.   |

### Secondary and Tertiary Care

There are no secondary or tertiary care providers in the Stonehouse Cluster.

### Social Care

There are nine registered care homes in the Stonehouse Cluster, each of them managed by private providers.

### Cam & Dursley

#### Primary Care

Table 23 set out the current provision of GPs within Cam & Dursley, including actual population, current GIA and the gap in current provision of service (sqm).

Table 23 Cam & Dursley GP Practices Spatial Assessment<sup>57</sup>

| Practice                   | Actual Population at April 2015 | Current GIA | Size Allowance | Gap in current provision (sqm) |
|----------------------------|---------------------------------|-------------|----------------|--------------------------------|
| Acorn Practice             | 4,204                           | 326         | 417            | -92                            |
| Cam & Uley Family Practice | 10,116                          | 520         | 875            | -347                           |

Table 24 sets out Cam & Dursley dental care provision including number of dentists, the provider and most recent Care Quality Commission (CQC) Rating.

Table 24 Cam & Dursley Dental Care Provision<sup>58</sup>

| Dental Practice            | Dentists (no of Staff) | Other Staff inc. Hygienists, orthodontists and dental nurses | Provider                   | CQC Rating                           |
|----------------------------|------------------------|--|----------------------------|--------------------------------------|
| Castle Gate Dental Limited | 2                      | 7  | Castle Gate Dental Limited | Provider met the relevant standards. |

### Secondary and Tertiary Care

The Vale Community Hospital<sup>59</sup> opened in 2011 at a cost of £10m. It currently offers both inpatient and outpatient services, a minor injuries unit, diagnostic facilities including x-ray and ultrasound, occupational therapy and physiotherapy.

<sup>57</sup> Appendix 1A Primary Care Infrastructure Plan 2016 to 2021 <https://www.goucestershireccg.nhs.uk/wp-content/uploads/2017/01/G-Primary-Care-Infrastructure-Plan-2016-to-2021.pdf>

<sup>58</sup> Care Quality Commission [https://www.cqc.org.uk/search/site/stroud?sort=default&distance=15&mode=html&f%5B0%5D=im\\_field\\_popular\\_services%3A3670](https://www.cqc.org.uk/search/site/stroud?sort=default&distance=15&mode=html&f%5B0%5D=im_field_popular_services%3A3670)

<sup>59</sup> Vale Community Hospital <https://www.ghc.nhs.uk/locations/vale/>



## Social Care

There are five care homes in the Cam & Dursley cluster, each provided by private providers.

### The Gloucester Fringe

#### Primary Care

There are no existing surgeries within the Gloucester Fringe Cluster, however both the Frampton Surgery, in Severn Vale and the Painswick Surgery, in the Cotswold Cluster do cover parts of this area. The Kingsway Surgery, which is located in Gloucester City also covers the area.

There are no dental surgeries within the Gloucester Fringe in Stroud District, there are however nearby there are surgeries at Quedgeley House Dental Practice and St. James Dental, both of which are in Quedgeley.

#### Secondary and Tertiary Care

There are no secondary or tertiary care providers in the Gloucester Fringe.

#### Social Care

There are two care homes in the Gloucester Fringe cluster. Both care homes are provided by private providers.

### The Berkeley Cluster

#### Primary Care

Table 25 set out the current provision of GPs within The Berkeley Cluster, including actual population, current GIA and the gap in current provision of service (sqm).

Table 25 Berkeley Cluster GP Spatial Assessment and Provision<sup>60</sup>

| Practice                 | Actual Population at April 2015 | Current GIA | Size Allowance | Gap in current provision (sqm) |
|--------------------------|---------------------------------|-------------|----------------|--------------------------------|
| Marybrook Medical Centre | 4,959                           | 465         | 417            | 48                             |

There are no dental surgeries within the Berkeley Cluster.

#### Secondary and Tertiary Care

There are no secondary or tertiary care providers in the Berkeley Cluster.

#### Social Care

There are two care homes in the Berkeley cluster. Both care homes are provided by private providers.

### The Severn Vale

#### Primary Care

Table 26 set out the current provision of GPs within The Severn Vale, including actual population, current GIA and the gap in current provision of service (sqm).

Table 26 Severn Vale GP Spatial Assessment and Provision<sup>61</sup>

| Practice         | Actual Population at April 2015 | Current GIA | Size Allowance | Gap in current provision (sqm) |
|------------------|---------------------------------|-------------|----------------|--------------------------------|
| Frampton Surgery | 5,017                           | 347         | 500            | -153                           |

There are no dental surgeries within the Severn Vale Cluster.

#### Secondary Care

There are no secondary or tertiary care providers in the Severn Vale Cluster.

<sup>60</sup> Appendix 1A Primary Care Infrastructure Plan 2016 to 2021 <https://www.gloucestershireccg.nhs.uk/wp-content/uploads/2017/01/G-Primary-Care-Infrastructure-Plan-2016-to-2021.pdf>

<sup>61</sup> Appendix 1A Primary Care Infrastructure Plan 2016 to 2021 <https://www.gloucestershireccg.nhs.uk/wp-content/uploads/2017/01/G-Primary-Care-Infrastructure-Plan-2016-to-2021.pdf>

## Social Care

There are no care homes in the Severn Vale Cluster.

## The Wotton Cluster

### Primary Care

Table 27 set out the current provision of GPs within The Wotton Cluster, including actual population, current GIA and the gap in current provision of service (sqm).

Table 27 Wotton Cluster GP Spatial Assessment and Provision<sup>62</sup>.

| Practice             | Actual Population at April 2015 | Current GIA | Size Allowance | Gap in current provision (sqm) |
|----------------------|---------------------------------|-------------|----------------|--------------------------------|
| The Chipping Surgery | 8,370                           | 542         | 750            | -208                           |
| Culverhay Surgery    | 6,256                           | 352         | 584            | -232                           |

Table 28 sets out the Wotton Cluster dental care provision including number of dentists, the provider, and most recent Care Quality Commission (CQC) Rating.

Table 28 The Cotswold Cluster Dental Care Provision<sup>63</sup>

| Dental Practice | Dentists (no of Staff) | Other Staff inc. Hygienists, orthodontists and dental nurses | Provider | CQC Rating |
|-----------------|------------------------|--|----------|------------|
|                 |                        |  |          |            |

<sup>62</sup> Appendix 1A Primary Care Infrastructure Plan 2016 to 2021 <https://www.gloucestershireccg.nhs.uk/wp-content/uploads/2017/01/G-Primary-Care-Infrastructure-Plan-2016-to-2021.pdf>

<sup>63</sup> Care Quality Commission [https://www.cqc.org.uk/search/site/stroud?sort=default&distance=15&mode=html&f%5B0%5D=im\\_field\\_popular\\_services%3A3670](https://www.cqc.org.uk/search/site/stroud?sort=default&distance=15&mode=html&f%5B0%5D=im_field_popular_services%3A3670)

|                                |   |    |  |   |
|--------------------------------|---|----|--|---|
| Chipping Manor Dental Practice | 7 | 12 | Chipping Manor Dental Practice Limited | The surgery achieved all the standards assessed by the CQC. |
|--------------------------------|---|----|--|---|

### Secondary and Tertiary Care

There are no secondary or tertiary care providers in the Wotton Cluster.

### Social Care

There are two registered care homes in the Wotton cluster. Both care homes are provided by private providers.

## The Cotswold Cluster

### Primary Care

Table 29 set out the current provision of GPs within The Severn Vale, including actual population, current GIA and the gap in current provision of service (sqm).

Table 29 Cotswold Cluster GP Spatial Assessment and Provision<sup>64</sup>

| Practice                        | Actual Population at April 2015 | Current GIA | Size Allowance | Gap in current provision (sqm) |
|---------------------------------|---------------------------------|-------------|----------------|--------------------------------|
| Painswick Surgery <sup>65</sup> | 4779                            | 545         | 417            | 128                            |

<sup>64</sup> Appendix 1A Primary Care Infrastructure Plan 2016 to 2021 <https://www.gloucestershireccg.nhs.uk/wp-content/uploads/2017/01/G-Primary-Care-Infrastructure-Plan-2016-to-2021.pdf>

<sup>65</sup> Painswick Surgery provides GP provision to The Gloucester Fringe and The Cotswold Cluster

Table 30 sets out the Cotswold Cluster dental care provision including number of dentists, the provider and most recent Care Quality Commission (CQC) Rating.

Table 30 The Cotswold Cluster Dental Care Provision<sup>66</sup>

| Dental Practice                         | Dentists (no of Staff) | Other Staff inc. Hygienists, orthodontists and dental nurses | Provider | CQC Rating  |
|---|------------------------|--|----------|---|
| Three Gables Dental and Holistic Centre | Not Available          | Not Available  | TGDH Ltd | The surgery achieved all the standards assessed by the CQC. |

### Secondary Care

There are no secondary or tertiary care providers in the Wotton Cluster.

### Tertiary Care

Three care homes are privately provided in the Cotswold Cluster.

## Planned Provision and Scheme Identification based on revised Housing and Employment Needs

### District-wide requirements and standards

The Planning Obligations Supplementary Planning Document 2017<sup>67</sup> and initial consultation with the CCG, GHFT and GHC during April 2020 has been used to generate potential contributions based on the distribution of growth set out in the Pre-submission Draft Local Plan. It should be noted that these requirements should be treated as indicative and will evolve as the Stroud Local Plan Review progresses and monetary values are benchmarks and do not consider specific site constraints. These values are qualified with discussion alongside each Parish Cluster.

### Primary Care

The CCG estimates that for every 10,000 people, a 1,000sqm doctors' surgery is required.

The CCG provided the following assumptions for the capital costs for new build and extension as part of the Consultation:

- Construction costs: approx. £2,450 per sqm
- Land acquisition costs: approx. £400,000-£500,000 for a new build surgery
- Design and contractor fees: 13% of construction costs
- VAT: 20% of total cost
- Preliminary costs: approx. £50-60 per sqm

Including all fees and costs, the typical cost per sqm of a new build doctors' surgery is **£4,000 per sqm**.

<sup>66</sup> Care Quality Commission  
[https://www.cqc.org.uk/search/site/stroud?sort=default&distance=15&mode=html&f%5B0%5D=im\\_field\\_popular\\_services%3A3670](https://www.cqc.org.uk/search/site/stroud?sort=default&distance=15&mode=html&f%5B0%5D=im_field_popular_services%3A3670)

<sup>67</sup> Stroud District Local Plan Planning Obligations Supplementary Planning Document  
<https://www.stroud.gov.uk/media/241797/planning-obligations-spd-final.pdf>

The cost of an extension to an existing GP surgery would not require land acquisition and therefore the cost for this type of scheme is estimated at **£3,500 per sqm**.

Generally, surgery sizing is population based, combined with minimum sizing of 199sqm (GIA). A new surgery would not be provided for less than 2,000 patients.

There are economies of scale in terms of numbers of patients and the amount of space required, whereby beyond 10,000 patients the rate of space per 1,000 patients roughly halves.

It is assumed for the purpose of the IDP that all Site Allocations below 1,000 homes (i.e. a population below 2,000 people) would be expected to contribute to improving and extending existing surgeries. Those Strategic Development Sites with a capacity of over 1,000 homes are anticipated to require new doctors' surgeries. These are highlighted in Table 31 in dark green.

It should be noted that this is an assumption for the purposes of benchmarking only, and a different approach may be required as sites come forward. In deciding to build a new surgery resulting from new housing developments, the preference is generally not to build lots of new small surgeries, which operationally become expensive to run compared to usage and maintaining workforce over multiple sites, unless the site is geographically dispersed from other residential areas or of such a size that it requires a new site.

Table 31 sets out an assessment of future primary care provision required to respond to the growth set out in the Local Plan Review for doctors and dentists as well as demand for acute healthcare beds. The red text in Table 31 denotes those sites that are not currently proposed to meet the housing needs of Stroud District Council.

The standards for dentist surgeries are derived from NHS London Healthy Urban Developments Unit Model. These set out the following:

- 130sqm of dentist surgery space per 2000 people
- At a cost of £1,750 per sqm

## Secondary and Tertiary Care

Cheltenham General Hospital and Gloucester Royal Hospital will remain the main providers of specialist healthcare across the County. The GHFT responds to growth in a retrospective manner using ONS data, with demographic changes being recorded to enable business case for increased investment in hospital care.

The GHFT is in the process of developing an Estate Strategy but given its recent successful bid as part of the NHS Strategic Site Development Fund for £40m to reconfigure its emergency facilities and acute medical unit, further development at Gloucester Royal Hospital is unlikely.

A planning application for additional theatre space at Gloucester Royal Hospital is anticipated for submission in June 2020, however this project is awaiting confirmation of its business case from NHS England.

Cheltenham General Hospital has developed a strategic outline business case for the improvement of its chemotherapy unit to respond to existing capacity issues. At this stage, no existing funding source has been identified and charitable funding is one method in which the GHFT are seeking to deliver the scheme.

The standards for acute bed spaces are derived from NHS London Healthy Urban Developments Unit Model, the standards for which are set out below:

- 1.8 acute bed spaces per 1000 people, with 50sqm required per bed
- At a cost of £1,750 per sqm

At GHC level, there is generally capacity at Stroud General Hospital and the Vale Community Hospital in Dursley. There are, however, several outdated facilities at Stroud which require refurbishment to respond to the growth set out in the Local Plan Review. An Estate Strategy is in the process of being produced, which will set out how to better use the GHC Estate and what demands are likely to be placed on the Trust's infrastructure in the next 5-10 years.

Table 31 Summary of Healthcare Demands and Costs (Arup, 2020)

| Ref                     | Site Allocation                              | Ward Cluster       | Housing Delivery to 2040 | Population   | Extension to surgery |                    | New Dentist Surgeries |                   | New acute bedspaces |                   | Total       |                    |
|-------------------------|--|--------------------|--------------------------|--------------|----------------------|--------------------|-----------------------|-------------------|---------------------|-------------------|-------------|--------------------|
|                         |  |                    |                          |              | Demand (sqm)         | Cost (£)           | Demand (sqm)          | Cost (£)          | Demand (sqm)        | Cost (£)          |             |                    |
| PS24                    | Cam North West (West of Draycott)            | Cam & Dursley      | 900                      | 2115         | 211.50               | £846,000           | 137.48                | £240,581          | 190.35              | £333,113          | 539.33      | £1,419,694         |
| PS25                    | Cam North East Extension (East of River Cam) | Cam & Dursley      | 180                      | 423          | 42.30                | £148,050           | 27.50                 | £48,116           | 38.07               | £66,623           | 107.87      | £262,789           |
| PS28                    | Dursley                                      | Cam & Dursley      | 10                       | 24           | 2.35                 | £8,225             | 1.53                  | £2,673            | 2.12                | £3,701            | 5.99        | £14,599            |
| PS19a                   | Stonehouse North West                        | Stonehouse Cluster | 700                      | 1645         | 164.50               | £575,750           | 106.93                | £187,119          | 148.05              | £259,088          | 419.48      | £1,021,956         |
| PS16 & PS42             | Leonard Stanley                              | Stonehouse Cluster | 40                       | 94           | 9.40                 | £32,900            | 6.11                  | £10,693           | 8.46                | £14,805           | 23.97       | £58,398            |
| PS17                    | Stonehouse                                   | Stonehouse Cluster | 10                       | 24           | 2.35                 | £8,225             | 1.53                  | £2,673            | 2.12                | £3,701            | 5.99        | £14,599            |
| PS01 & PS02             | Brimscombe & Thrupp                          | Stroud Valleys     | 190                      | 447          | 44.65                | £156,275           | 29.02                 | £50,789           | 40.19               | £70,324           | 113.86      | £277,388           |
| PS05                    | Minchinhampton                               | Stroud Valleys     | 80                       | 188          | 18.80                | £65,800            | 12.22                 | £21,385           | 16.92               | £29,610           | 47.94       | £116,795           |
| PS06 & PS07             | Nailsworth                                   | Stroud Valleys     | 90                       | 212          | 21.15                | £74,025            | 13.75                 | £24,058           | 19.04               | £33,311           | 53.93       | £131,394           |
| PS10, PS11, PS12 & PS13 | Stroud                                       | Stroud Valleys     | 165                      | 388          | 38.78                | £135,713           | 25.20                 | £44,107           | 34.9                | £61,071           | 98.88       | £240,890           |
| PS34                    | Sharpness Docks                              | Berkeley Cluster   | 300                      | 705          | 70.50                | £246,750           | 45.83                 | £80,194           | 63.45               | £111,038          | 179.78      | £437,981           |
| PS36                    | Sharpness (Garden Village)                   | Berkeley Cluster   | 2400                     | 5640         | 564.00               | £2,256,000         | 366.60                | £641,550          | 507.6               | £888,300          | 1438.20     | £3,785,850         |
| PS37                    | Wisloe (Garden Village)                      | Berkeley Cluster   | 1500                     | 3525         | 352.50               | £1,410,000         | 229.13                | £400,969          | 317.25              | £555,188          | 898.88      | £2,366,156         |
| PS33                    | Berkeley                                     | Berkeley Cluster   | 170                      | 400          | 39.95                | £139,825           | 25.97                 | £45,443           | 35.96               | £62,921           | 101.87      | £248,189           |
| PS35                    | Newtown & Sharpness                          | Berkeley Cluster   | 70                       | 165          | 16.45                | £57,575            | 10.69                 | £18,712           | 14.81               | £25,909           | 41.95       | £102,196           |
| PS41                    | Painswick                                    | Cotswold Cluster   | 20                       | 47           | 4.70                 | £16,450            | 3.06                  | £5,346            | 4.23                | £7,403            | 11.99       | £29,199            |
| G1                      | South of Hardwicke                           | Gloucester Fringe  | 1350                     | 3173         | 317.25               | £1,110,375         | 206.21                | £360,872          | 285.53              | £499,669          | 808.99      | £1,970,916         |
| PS30                    | Hunts Grove Extension                        | Gloucester Fringe  | 750                      | 1763         | 176.25               | £705,000           | 114.56                | £200,484          | 158.63              | £277,594          | 449.44      | £1,183,078         |
| HAR017                  | Hardwicke                                    | Gloucester Fringe  | 10                       | 24           | 2.35                 | £8,225             | 1.53                  | £2,673            | 2.12                | £3,701            | 5.99        | £14,599            |
| G2                      | Land at Whaddon                              | Gloucester Fringe  | 3000                     | 7050         | 705.00               | £2,820,000         | 458.25                | £801,938          | 634.5               | £1,110,375        | 1797.75     | £4,732,313         |
| PS44                    | Frampton-on-Severn                           | The Severn Vale    | 30                       | 71           | 7.05                 | £24,675            | 4.58                  | £8,019            | 6.35                | £11,104           | 17.98       | £43,798            |
| PS45 & PS46             | Whitminster                                  | The Severn Vale    | 50                       | 118          | 11.75                | £41,125            | 7.64                  | £13,366           | 10.58               | £18,506           | 29.96       | £72,997            |
| PS38                    | Kingswood                                    | The Wotton Cluster | 50                       | 118          | 11.75                | £41,125            | 7.64                  | £13,366           | 10.58               | £18,506           | 29.96       | £72,997            |
| <b>TOTAL</b>            |  |                    | <b>12065</b>             | <b>28353</b> | <b>2835</b>          | <b>£10,928,088</b> | <b>1843</b>           | <b>£3,225,125</b> | <b>2552</b>         | <b>£4,465,558</b> | <b>7230</b> | <b>£18,618,771</b> |

£XX \*Green cell denotes that population increase is sufficient to require a new surgery.

## The Stroud Valleys

### Primary Care

The Stroud Valleys is one of Stroud's largest and most populous clusters. The Pre-submission Draft Local Plan identified 525 houses to be delivered through Local Development Sites at Stroud, Brimscombe and Thrupp, Minchinhampton and Nailsworth.

The growth set out in the Local Plan Review would require the addition of a further 123sqm of doctors' surgery space within the Stroud Valleys Cluster, at a cost of circa £432,000.

The Primary Care Infrastructure Plan identifies the priority to deliver the new doctors' surgery in Stroud town centre on King Street, which will provide space for both the Stroud Valleys and Locking Hill Practices. It is anticipated that this will provide GP and Primary Care provision to an estimated list size of 26,327 and will have a GIA of approximately 1,796 sqm.

The PCIP identifies the replacement of the Minchinhampton Surgery as project to address capacity issues associated with existing levels of growth. The replacement of the surgery is anticipated to have a capital cost of £2million<sup>68</sup> and a GIA approximately 670sqm. The business case for this surgery has been approved, but the site is awaiting planning permission.

It is the intent of the CCG to develop a scheme for the Beeches Green Health Centre in Stroud, however this is yet to be developed. The PCIP identifies the development of a strategic plan for Beeches Green Health Centre as a priority.

For dentist surgeries, a demand for a further 80sqm of floorspace is calculated, at a cost of £140,000. The quality and coverage of existing dentist surgeries is generally good in Stroud Valleys, and it would likely be a private business decision to expand or develop a new site to respond to population growth.

<sup>68</sup> Capital cost 1,725 sqm + fees at 12% plus VAT and average land costs.

### Secondary and Tertiary Care

The four Stroud hospital buildings; Stroud General, Stroud Maternity, Park House and Weavers Croft are considered as a campus by the GHC and given the significant footprint could be subject to a rationalisation to ensure the buildings are maximised in terms of efficiency.

An Estate Strategy is to be produced by the GHC in late 2020 to test the effectiveness of the current estate at Stroud and Dursley, but there are number of infrastructure projects that are identified in the Trust's Capital Plan for 2020/21. These include:

- Upgrade to the air handling unit in the endoscopy service at Stroud General Hospital
- A comprehensive redesign and refurbishment of Minor Injury & Illness Unit at Stroud General Hospital
- A refurbishment of Jubilee Ward at Stroud General Hospital
- Relocation of physiotherapy services and conversion of current space for administrative purposes
- A redesign and reconfiguration of Stroud learning disability inpatient unit
- Installation of electric vehicle charging points at selected GHC sites
- Upgrading of clinic rooms at Stroud General and Weavers Croft to include soundproofing

New residents would be expected to travel to Gloucester Royal Hospital or Cheltenham General Hospital for more specialist services.

On the basis of standards derived from the NHS London Healthy Urban Developments Unit model, it is estimated that a total of 111sqm of new acute healthcare floorspace (equivalent to up to 3 bed spaces) would need to be provided at a cost of around £194,000.

## Social Care

The vast majority of care homes within the Stroud Valleys Cluster are privately provided, and as such, any response to the growth set out in the plan would be a private business decision to expand or provide a new facility.

### The Stonehouse Cluster

#### Primary Care

The Pre-submission Draft Local Plan identifies 750 new dwellings to be delivered at one Strategic and two Local Development Sites through Core Policy CP2.

The level of growth is likely to require investment in improving and expanding existing surgeries at the High Street Medical Centre, Stonehouse Health Clinic and/or Regent Street Surgery. The CCG standards set out in Table 31 estimate the demand for additional space would equate to approximately 176sqm at a cost of circa £616,000.

The PCIP identifies a joint development for Stonehouse and north west of Stonehouse between Regent Street and Stonehouse health clinic or a new single development through Regent Street as a priority development. The new development would provide for an estimated list size of 10,000 patients and would have a capital cost<sup>69</sup> of £2.47m.

Development of a primary care facility in this location is identified as a key priority of the PCIP for 2021 and the CCG anticipate that planning obligations may be required to part-fund the new Stonehouse surgery.

#### Secondary and Tertiary Care

There are no secondary or tertiary care facilities in the Stonehouse Cluster, with no plans to develop a facility to respond to growth.

New residents would be expected to travel to Stroud Hospital for a range of services, whilst more specialist services would be provided at Gloucester and Cheltenham Hospitals.

It is estimated that a further 158 of acute healthcare floorspace (equivalent to approximately 4 acute bed spaces) would be required to respond to the level of growth allocated in Stonehouse. This would be at a cost of approximately £278,000.

#### Social Care

All nine of the care homes in the Stonehouse cluster are privately provided. It is likely that any increases in demand for social care would be a private business decision.

### Cam & Dursley

#### Primary Care

The Pre-submission Draft Local Plan identifies 905 houses to be delivered through two Strategic Development Sites and two Local Development Sites through Core Policy CP2.

The quantum of development in the Cam and Dursley cluster is likely to require additional doctor surgery floorspace of around 256sqm at a cost of £1,000,000. The Cam North West site allocation is likely to be of sufficient size to warrant creation of a new doctors' surgery onsite, There is likely to be additional demand for a further 166sqm of dentist surgery space at a cost of £291,000.

The PCIP outlines that the CCG exploring development options for the Cam & Uley Family Practice. The development options include the possible expansion of premises at the existing site, together with associated facilities such as parking. The practice has been in contact with CCG around potential funding mechanisms.

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<sup>69</sup> Capital cost £1,725 sqm + fees at 12% plus VAT and average land costs.



## Secondary and Tertiary Care

The Vale Community Hospital provides hospital care to Cam, Dursley and the surrounding area, and includes County-wide stroke rehabilitation.

The GHC has highlighted that, given the relative recency of its opening, the Vale Community Hospital has the capacity to cope with growth set out in the Local Plan Review.

The standards calculations estimate a total of 230sqm of acute healthcare space would be required to respond to growth, at a cost of £404,000.

## Social Care

All five care homes in the Cam & Dursley cluster are privately provided, and as such, any decision to improve or expand would be a private business decision.

## The Gloucester Fringe

### Primary Care

The Pre-submission Draft Local Plan identifies 5,110 houses and 14 ha of employment land to be delivered through five Strategic and Local Development Sites through Core Policy CP2. This includes a site allocation 'Land at Whaddon' for approximately 3,000 homes that may be required to meet the housing needs of Gloucester.

It is estimated that for sites in the Gloucester Fringe an additional 1,200sqm of primary care floorspace would be required to respond to Local Plan Review growth. It is estimated that the cost of this would be approximately £4.65m.

A new GP surgery was identified for development in the 2014 IDP as part of the Hunts Grove Strategic Development Site. This site is yet to deliver a surgery, and if one is not delivered as part of the proposed 750 home Hunts Grove Extension site outlined in Policy CP2, it is likely that an extension would be required to Kingsway Surgery. Contributions should be sought from major development to support this.

A solution is yet to be identified by the CCG in relation to the South of Hardwicke allocation. The allocation is potentially large enough in itself (over 2,000 population) to warrant the creation of a branch surgery, or alternatively, contributions would be sought to improve an existing health centre. Kingsway Health Centre would geographically be the closest, however this is still some distance away.

The proposed Land at Whaddon allocation would likely require a new surgery to be provided onsite given its size and when considered alongside the other levels of growth set out in the Gloucester Fringe could place significant pressure on the surgeries to the south and east of Gloucester.

## Secondary and Tertiary Care

There are no secondary or tertiary healthcare providers within the Gloucester Fringe. It is expected that new residents within this area would travel to Gloucester Royal Hospital for hospital care.

The NHS Strategic Site Development funded improvements are expected to increase emergency department capacity and the development of the Acute Medical Unit should be sufficient to respond to growth set out in the Local Plan Review.

It is estimated a total of 1,080sqm of acute healthcare space would be required to respond to growth, at a cost of £1.9m.

## Social Care

The two care homes in the Gloucester Fringe cluster are privately provided. Any decision to expand or to provide further social care would be led by private business.

## The Berkeley Cluster

### Primary Care

The Pre-submission Draft Local Plan identifies 4,440 houses (7,000 by 2050) to be delivered at five Strategic and Local Development Sites identified in Core Policy CP2.

It is understood that the Marybrook Medical Centre in Berkeley is exploring options for an expansion to respond to existing growth, however this £900,000 scheme of improvements would not be sufficient to respond to the significant levels of growth proposed in Sharpness.

It is likely that both the Sharpness Strategic Development Sites will need to contribute to a larger expansion of Marybrook, or alternatively provide a facility within the Garden Village.

As there are limited options for expansion at the Cam & Uley Family Practice, it is likely that a branch surgery would need to be provided at the Wisloe Garden Village or the development would need to contribute to relocating the existing surgery.

Using CCG benchmarks, it is estimated that for sites in the Berkeley Cluster an additional 1,043sqm of primary care floorspace would be required to respond to Local Plan Review growth. It is estimated that the cost of this would be approximately £4.1m.

### Secondary and Tertiary Care

Residents living in the Berkeley Cluster would be expected to travel to the Vale Community Hospital for hospital care, and to Gloucester Royal Hospital or North Bristol NHS Trust sites for more complex hospital care.

It is estimated that the growth set out in the Berkeley Cluster would create demand for an additional 939sqm of acute healthcare floorspace, at a cost of £1.6m.

### Social Care

The two care homes in the Berkeley Cluster are privately provided and it is expected that any expansion or new care home would likely need to be a private business decision.

## The Severn Vale

### Primary Care

The Pre-submission Draft Local Plan identifies 70 houses to be provided through one Local Development Site through Core Policy CP2.

Land around the site allocation at Frampton-on-Severn which is identified for development (ref. PS44) could be used to expand the existing Frampton Surgery to respond to growth in the area.

It is estimated that the growth set out above would require 18sqm of additional GP surgery space at a cost of £66,000.

### Secondary and Tertiary Care

There are no secondary or tertiary healthcare providers within the Severn Vale Cluster. It is expected that new residents within this area would travel to Gloucester Royal Hospital or to Stroud General Hospital for hospital care.

It is estimated that the growth set out in the Severn Vale Cluster would create demand for an additional 16sqm of acute healthcare floorspace, at a cost of £29,600.

### Social Care

No care homes are currently provided in the Severn Vale cluster. Future residents would likely need to rely on private care home provision in Stonehouse, Stroud or Gloucester.

## The Wotton Cluster

### Primary Care

The proposed levels of growth set out in the Local Plan Review in the Wotton Cluster are not considered to be sufficient to require the expansion or improvement of existing practices, particularly as the Culverhay Surgery and the Chipping Surgery have been identified for improvement to respond to existing growth.

The Culverhay Surgery has been identified by the CCG for refurbishment and additional clinical capacity through Estates and Technology Transformation Funding. Chipping Surgery has been identified by the CCG for a two-phased refurbishment and extension.

The growth set out in the Local Plan Review would require 12sqm of additional floorspace at a cost of £41,000, based on CCG benchmarks.

### Secondary and Tertiary Care

The proposed levels of growth would not require improvements to secondary and tertiary care.

### Social Care

The three care homes in the Wotton cluster are privately provided. Any expansion or improvement would be a private business decision.

## The Cotswold Cluster

### Primary Care

The 2019 Draft Local Plan identifies 20 houses to be provided on one Local Development Site through Core Policy CP2.

No additional primary care development has been identified to support the Cotswold Cluster. The existing surgery at Painswick would be sufficiently large to respond to the growth set out in the Local Plan Review. Based on CCG

benchmarks, there would be a requirement for 5sqm of additional floorspace at a cost of £16,500.

### Secondary Care

The proposed levels of growth would not require improvements to secondary and tertiary care.

### Tertiary Care

The three care homes in the Cotswold cluster are privately provided. Any expansion or improvement would be a private business decision.

## Sector-specific Funding

The CCG has set out within its response to consultation (April 2020) that, in the main, the capital costs GP surgeries are funded through 3 main ways: -

- GP-led (i.e. a private business decision) borrow the money from banks and build the surgery. As owners, the GPs then seek a rent from the local NHS (the CCG) for the provision of the General Medical Services they are contracted to provide.
- GPs select a 3<sup>rd</sup> party developer who fund the capital costs and the practices become tenants signing a lease and paying rent. In this situation, the Practice seeks a reimbursement from the NHS to cover these costs for the provision of the General Medical Services they are contracted to provide – a recurrent annual revenue commitment.
- Finally, the NHS invests capital itself through a national body called NHS Property Services. Practices become tenants and pay a rent. Once again, the practice seeks reimbursement from the local CCG to cover these rental costs and to pay the NHS Property Services.

Each of these approaches to funding then become a recurrent annual revenue commitment by the CCG.

Funding new or improved dentist surgeries and care homes is likely to be a private business decision, and unlikely to rely on planning obligations or other forms of developer funding unless a development would result in significant pressure on a particular service.

## Conclusions

Based on standards developed by the CCG, it is estimated that the growth set out in the Local Plan Review would require the provision of **an additional 2,835sqm of doctor surgery space, at a cost of £10.9m**. It is estimated that **a further 1,800sqm of dentist surgery space is required, at a cost of £3.2m**.

Dependent on the solution, the CCG will seek a contribution of between £640 and £730 per dwelling. This figure reduces considerably where the registered population at that site is already more than 10,000 patients.

The CCG would determine, in collaboration with the appropriate doctors' surgeries, whether significant housing development would require expansion or improvement to an existing facility or need the provision of a new surgery. It could be the case that a GP practice consider the best option to be the development of a new facility to accommodate their existing practice population and the population resulting from the housing development.

Typically, new schemes take five to seven years from conception to delivery and as such, it is important that developers engage with the CCG to ensure the most effective and efficient solution is found.

It is estimated, using the NHS London Healthy Urban Developments Unit model that **a total of 51 acute hospital bed spaces are required, equivalent to 2,550sqm of hospital space. This would be at a cost of £4.5m**.

Generally, the provision of hospital care in Stroud and the surrounding area is good. £40m has been invested in the emergency department at Gloucester Royal

Hospital and the Vale Community Hospital is a modern facility with capacity to respond to the growth set out in Local Plan Review.

The emerging Estate Strategies for both the GHFT and GHC will consider the effectiveness of the hospital estate in Stroud and more widely in Gloucestershire and the IDP should consider these documents once published.

The demand for residential care home placements is generally decreasing as more people choose to stay at their own home and receive care and support<sup>70</sup>. Investment in new care homes or improvements to existing care homes would generally be private business led.

The availability of alternative forms of care which enable people to remain independent for longer in their own homes is resulting in admissions to residential care increasingly being individuals with complex or multiple care needs.

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<sup>70</sup> Gloucestershire County Council – Older People Care Home Strategy 2019  
<https://www.gloucestershire.gov.uk/media/2090287/care-home-strategyjune5.pdf>

## 8 Infrastructure Assessment: Open Space, Green Infrastructure and Biodiversity

### Responsibility for delivery

Table 32 below outlines the key partners in managing existing and securing new open spaces and green infrastructure within Stroud District, along with those bodies which promote and protect nature and biodiversity.

| Service Provider                                      | Responsibility   |
|---|--|
| <b>Natural England</b>                                | Natural England is a non-departmental public body responsible for promoting nature conservation and protecting biodiversity, as well as managing nationally significant designated nature sites. In Stroud, Natural England works with Stroud District Council to administer the Severn Estuary and Rodborough Common Mitigation Strategies. |
| <b>Gloucestershire County Council</b>                 | Gloucestershire County Council supports the delivery of strategic county-based nature and biodiversity projects in Gloucestershire. Its role as Highway Authority is to deliver green infrastructure and biodiversity improvements through highway projects, supported through the Local Transport Plan.                                     |
| <b>Stroud District Council</b>                        | Responsibility for development and maintenance of parks and open spaces in the district lies with the District Council. In some cases, management companies may be responsible for open spaces. The District Council also manages the Severn Estuary and Rodborough Common Mitigation Strategies in cooperation with Natural England.        |
| <b>Town and parish councils and community groups</b>  | Many town and parish councils, and some community organisations, own or manage open spaces within Stroud District.   |
| <b>Gloucestershire Local Nature Partnership (LNP)</b> | The LNP is a group of organisations which aims to promote, conserve and enhance nature in Gloucestershire. Its members include the county and district councils, the Cotswold Conservation Board, the Environment Agency, Gloucestershire Wildlife Trust, CPRE and Natural England.  |

### Overview of progress since the 2014 IDP

#### Literature, Policy and Strategy Changes

**The Stroud District IDP Refresh (2014):** The 2014 IDP was informed by a draft version of the Strategic Framework for Green Infrastructure in Gloucestershire and an update to the assessment of outdoor play space. These documents identified shortfalls in open space and play space in the Stroud Valleys, Cam & Dursley and the Stonehouse Cluster.

The 2014 IDP used Natural England’s Accessible Natural Green Space Standards (ANGST) to determine the amount of green space related to development as well as the Six Acre Standard.

The application of these standards identified a need for approximately 9-10ha of informal recreational open space at a total cost of around £167,000. It estimated a cost of approximately £4.3m for the provision of between 16.6 and 17.8ha of accessible natural greenspace. Given the nature of this type of infrastructure, it was expected that this would largely be provided onsite within developments and included within masterplans for the strategic site allocations.

The following projects were identified in the 2014 IDP:

- Rodborough Commons Management Plan; including visitor management measures
- Compensatory habitat in response to development at Sharpness
- The Cotswold Canals Restoration project, which includes circa £50m of projects to restore the Stroudwater Navigation and Thames and Severn Canals. Funded in part Heritage Lottery Fund and the District Council

#### Changes since 2014 IDP: Overarching Documents

**Revised National Planning Policy Framework (2019):** The NPPF includes the objective to contribute to protecting and enhancing our natural, built and historic environment. It sets out aims to make effective use of land, improve

biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change.

Section 15 of the NPPF, ‘Conserving and enhancing the natural environment’ sets out that planning policies and decisions should protect valued landscapes, recognising local character, provide net gains for biodiversity and prevent development from resulting in unacceptable impacts on environmental conditions.

The NPPF defines green infrastructure as “A network of multi-functional green space, urban and rural, which is capable of delivering a wide range of environmental and quality of life benefits for local communities.”

**The Environment Bill 2020<sup>71</sup>:** Whilst yet to receive royal assent, the Environment Bill sets out principles for tackling biodiversity loss, climate change and environmental risk. It follows the existing legislation to reach net-zero carbon emissions by 2050 and includes a mandatory requirement for biodiversity net gain in the planning system.

The Bill introduces the requirement for the development of Local Nature Recovery Strategies to set out priorities and opportunities for protecting and investing in nature in local authority areas.

**Strategic Framework for Green Infrastructure in Gloucestershire<sup>72</sup> (2015):** This Local Nature Partnership document sets out a high-level framework with the aim to encourage improvements to green infrastructure at various spatial levels within Gloucestershire.

The Framework sets out what green and blue infrastructure is and includes some principles. Green infrastructure must be functional, well-connected and critical gaps should be addressed. Opportunities to maximise green infrastructure as part of development are supported and requirements for green infrastructure should be embedded in local plans policies.

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<sup>71</sup> Department for Environment Food & Rural Affairs (2020) Environment Bill 2020 policy statement. Available: <https://www.gov.uk/government/publications/environment-bill-2020/30-january-2020-environment-bill-2020-policy-statement>

<sup>72</sup> Gloucestershire Local Nature Partnership (2015) Strategic Framework for Green Infrastructure in Gloucestershire. Available: [https://www.stroud.gov.uk/media/558659/gi\\_framework\\_final\\_2015.pdf](https://www.stroud.gov.uk/media/558659/gi_framework_final_2015.pdf)

A revised Framework is being produced and is anticipated for publication in late 2020.

**Gloucestershire Local Nature Partnership Strategy 2019-2022<sup>73</sup>:** The LNP Strategy outlines the risks to the natural environment posed by development, and seeks to improve access to nature for the benefit of health and wellbeing, to increase and enhance nature to support society and the economy, and to provide a voice for nature through the Partnership.

The Partnership seek to champion the health benefits of nature, increase engagement and improve access to nature.

Tasks undertaken by the partnership include the development of the Nature Recovery Network, influencing national policy, developing and endorsing nature-based tools.

The **Nature Recovery Network<sup>74</sup>** project seeks to create a spatial master plan for the nature restoration covering the entirety of Gloucestershire. This will likely be a GIS-based tool. This will be linked to a Natural Capital Baseline and Mapping Tool which is currently in the design phase.

**Stroud District Local Plan Review: Pre-submission Draft Plan (2021):** The Draft Local Plan seeks to conserve and enhance Stroud’s countryside and biodiversity, including maximising the potential for a green infrastructure network across the District. It establishes the principles for biodiversity net gain and safeguarding local wildlife-rich habitats through Policies CP14 ‘High quality sustainable development’ and ES6 ‘Providing for biodiversity and geodiversity’. Development should protect and improve green infrastructure in accordance with Policy DES2.

**Stroud District Open Space and Green Infrastructure Study (2019):** This document forms part of the wider Open Space, Green Infrastructure, Sport and Recreation Study, which assesses existing and future needs for open space,

<sup>73</sup> Gloucestershire Local Nature Partnership (2019) The Future for Nature 2019-2022. Available: [https://f55bc3b4-dbac-4e43-8254-a45b43ca06b3.filesusr.com/ugd/49624c\\_bd3f73911fb74e4f8d5d4cdba374dc14.pdf](https://f55bc3b4-dbac-4e43-8254-a45b43ca06b3.filesusr.com/ugd/49624c_bd3f73911fb74e4f8d5d4cdba374dc14.pdf)

<sup>74</sup> Gloucestershire Local Nature Partnership (2019) Nature Recovery Network. Available: <https://www.gloucestershirenature.org.uk/nature-recovery-network>



green infrastructure, sport and recreation in Stroud using existing and newly-gathered data, such as site surveys and stakeholder / community consultation.

The Open Space and Green Infrastructure part of the study identifies local needs, audits existing open space and GI standards and creates its own standards to apply to and analyse the existing GI network.

Open space is defined within the study as “those green spaces having recreational value and being freely accessible to the public (the exception to this is allotments, which are generally not freely accessible, but are an important component of open space provision).”

**Scheme and Project Delivery**

**Schemes since 2014:**

**Rodborough Common Mitigation Strategy:** This strategy was formally adopted in 2015 to mitigate recreational pressures on the Rodborough Common SAC arising from the growth set out in the 2015 Local Plan. Stroud District Council has agreed with Natural England to adopt an impact avoidance strategy for housing within the 3km core catchment of the Rodborough Common SAC. The avoidance strategy requires new development in this catchment to contribute £200 per dwelling to Stroud District Council to support providing mitigation to avoid likely significant effects on the SAC.

**Severn Estuary Recreation & Mitigation Strategy:** This seeks to mitigate disturbance of wintering bird habitats on the Upper Severn Estuary SAC, SPA and Ramsar site from recreational activity. This work, led by Stroud District Council in partnership with Natural England, the Wildfowl and Wetlands Trust and the Severn Estuary Partnership, has evidenced recreational impacts on key bird species linked to new residential development. The Strategy was adopted in 2017 and defines a 7.7km core catchment area based on visitor survey analysis and puts in place a process for financial contributions to be collected from new development within this area to deliver onsite mitigation. Based on 2017 figures, this contribution was equivalent to £385 per dwelling.

**Cotswold Canals Project:** This canal restoration seeks to link the national network of canals to Stonehouse and Saul. It includes £113m of investment from councils and charitable funding.

**Natural Capital Baseline and Mapping:** The LNP has been commissioned by the Gloucestershire Joint Economic Growth Committee and the Local Enterprise Partnership to develop a Natural Capital Baseline for the county. This tool will outline the state of the natural environment across Gloucestershire, including water quality, flood risk, air quality, biodiversity, access to green space and soil quality. A draft version of the Baseline is to be published in summer 2021, and it is expected that the interactive map will be developed in late 2021.

**Functionally Linked Land Study for the Severn Vale:** Natural England has commissioned a study to understand the links between land outside of the Severn Estuary SAC/SPA and its connection to the estuary. Further work is likely to be undertaken to determine likely impacts on these sites from development and a GIS dataset is to be created to identify land appropriate for development and land that should be protected.

**Assessment of Current Infrastructure Provision**

The Stroud District Open Space and Green Infrastructure Study outlines that residents consider there are generally enough open spaces of most types, however there is a lack of safe cycleways, footpaths and bridleways. Household surveys indicate that the spaces are generally of average to good quality.

Table 33 below has been extracted from the Open Space and Green Infrastructure Study. It sets out a summary of the quantities of different green infrastructure typologies across Stroud District, and also includes a quantity per 1000 people.

Table 33 Total quantities of open space within Stroud District, by typology

| Typology           | Existing (ha) | Existing (ha/1000)20 |
|--------------------|---------------|----------------------|
| Allotments         | 41.66         | 0.35                 |
| Community Orchards | 15.34         | 0.13                 |



| Typology   | Existing (ha) | Existing (ha/1000)20 |
|--|---------------|----------------------|
| Amenity Greenspace (>0.15ha)                             | 42.57         | 0.36                 |
| Parks and Recreation Grounds (combined), which includes: | 141.46        | 1.19                 |
| <i>Parks and Recreation Grounds</i>                      | 139.78        | 1.18                 |
| <i>Outdoor Sport (Fixed)</i>                             | 1.68          | 0.01                 |
| Play (Child)   | 6.58          | 0.06                 |
| Play (Youth)   | 4.23          | 0.04                 |
| Accessible Natural Greenspace                            | 2366.61       | 19.96                |
| Cemeteries and Churchyards                               | 61.03         | 0.51                 |
| Education  | 161.95        | 1.37                 |
| Outdoor Sport (Private)                                  | 92.35         | 0.78                 |

There are a wide variety nature conservation and biodiversity, cultural, landscape designations across Stroud, including over 2500ha of ancient woodland, almost 3000ha of Local Wildlife Sites, 1400ha of internationally designated Special Protection Area / Ramsar and 1800ha of Special Areas of Conservation. There are 14 Registered Parks and Gardens and 68 Scheduled Ancient Monuments in Stroud District.

The Cotswold Area of Outstanding Beauty lies in the east of the district and includes the rural areas around Wotton-under-Edge in the south, Uley and Nailsworth in the heart of the district and up to Painswick in the north.

In terms of Blue GI, the main rivers and canals and streams in Stroud are as follows:

Table 34 'Blue' Green Infrastructure in Stroud District

| Main rivers  | Canals                  | Streams          |
|--------------|-------------------------|------------------|
| River Severn | Stroudwater Canal       | Painswick Stream |
| River Frome  | Thames and Severn Canal | Toadsmoor Stream |

<sup>75</sup>Ethos Planning (2019) Stroud Open Space and Green Infrastructure Study (Stroud Valleys Sub Area Analysis) Available: [https://www.stroud.gov.uk/media/1070621/cluster-analysis-part-2-v5\\_stroud-valleys-cluster\\_opt.pdf](https://www.stroud.gov.uk/media/1070621/cluster-analysis-part-2-v5_stroud-valleys-cluster_opt.pdf)

|  |   |   |
|--|---|---|
| River Cam<br>River Twyver<br>River Ewelme<br>Little Avon River | The Gloucestershire and Sharpness Canal | Nailsworth Stream<br>Shorn Brook<br>Daniels Brook |
|--|---|---|

## The Stroud Valleys

The Open Space Quality Audit within the Open Space and Green Infrastructure Study identifies over 110 open spaces and play spaces within the Stroud Valleys area. Table 1 of the Stroud Open Space and Green Infrastructure Study (Stroud Valleys Sub Area Analysis<sup>75</sup>) that there is generally sufficient supply of allotments in the Cluster, but an undersupply of amenity green spaces, parks and recreation grounds and play space.

The Open Space Quality Audit outlines that all but a handful of the open spaces are of good quality.

The Stroud Valleys also benefits from a number of protected sites and biodiverse habitats. This includes Rodborough Common, which is designated as a Special Area of Conservation (SAC) and as a Site of Special Scientific Interest (SSSI). Rodborough Common is the most extensive area of semi-natural dry grasslands surviving in the Cotswolds of central southern England.

The Stroud Valleys includes part of the Cotswold Scarp Nature Improvement Area, designated to support ecological habitats from Stroud up to Ebrington Hill.

A strategic district green infrastructure corridor, defined in the Open Space and Green Infrastructure Study, links Saul, in the Severn Vale, to Stroud. It includes the River Frome Local Wildlife Site (LWS) and Stroudwater Canal.

The Stroud Valleys also includes areas of ancient woodland, and these are identified in the Open Space and Green Infrastructure study as strategic district green infrastructure corridors at:

- Selsey Common SSSI to Kingscote via Nailsworth. These areas include Nailsworth Brook LWS.
- Minchinhampton Common to Cherington
- River Frome and Thames and Severn Canal east from Stroud through Ancient Woodlands and Key Wildlife Sites.

Other statutory designated sites in the Stroud Valleys include:

- Kingscote and Horsley Woods SSSI
- Woodchester Park SSSI
- Box Farm Meadows SSSI
- Minchinhampton Common SSSI
- Strawberry Banks SSSI
- Bisley Road Cemetery Local Nature Reserve

### The Stonehouse Cluster

Table 1 of the Stroud Open Space and Green Infrastructure Study (Stonehouse Cluster Sub Area Analysis<sup>76</sup>) that there is generally sufficient supply of parks and recreation grounds and play space in the Cluster, but an undersupply of allotments and amenity green spaces.

Over 40 open spaces and play spaces were assessed in the Stonehouse Cluster. These are almost entirely audited as being of good quality.

The Selsey Common SSSI sits across the border of the Stonehouse and Stroud Valleys Clusters and much of the Cluster is designated as AONB.

<sup>76</sup>Ethos Planning (2019) Stroud Open Space and Green Infrastructure Study (Stonehouse Cluster Sub Area Analysis). Available: [https://www.stroud.gov.uk/media/1070624/cluster-analysis-part-2-v5\\_stonehouse-cluster.pdf](https://www.stroud.gov.uk/media/1070624/cluster-analysis-part-2-v5_stonehouse-cluster.pdf) [https://www.stroud.gov.uk/media/1070621/cluster-analysis-part-2-v5\\_stroud-valleys-cluster\\_opt.pdf](https://www.stroud.gov.uk/media/1070621/cluster-analysis-part-2-v5_stroud-valleys-cluster_opt.pdf)

### Cam & Dursley

The Open Space Quality Audit identifies over 40 open spaces and play spaces spread across Cam, Dursley and the surrounding area. The audit does however a significant number of these are considered to be of moderate quality.

Table 1 of the Stroud Open Space and Green Infrastructure Study (Cam and Dursley Cluster Sub Area Analysis<sup>77</sup>) outlines that there is generally an undersupply of allotments, amenity greenspace, parks and recreation grounds and play space in the Cluster.

The Cam & Dursley cluster includes a strategic district green infrastructure corridor along the River Cam linking Dursley to Frampton grazing marsh.

Designated sites in the Cam & Dursley Cluster include:

- Stinchcombe Hill SSSI, (noted on Defra's Magic Map as being in an unfavourable condition)
- Coaley Wood Quarries SSSI
- Woodchester Park SSSI

### The Gloucester Fringe

Table 1 of the Stroud Open Space and Green Infrastructure Study (Gloucester Fringe Cluster Sub Area Analysis<sup>78</sup>) outlines that whilst there is sufficient supply of amenity greenspace, there is generally an undersupply of other types of open space and play space.

Over 30 open spaces were audited as part of the assessment. 28 open spaces were considered to be of good quality, with the remainder considered moderate.

<sup>77</sup>Ethos Planning (2019) Stroud Open Space and Green Infrastructure Study (Cam and Dursley Sub Area Analysis). Available: [https://www.stroud.gov.uk/media/1070618/cluster-analysis-part-2-v5\\_cam-and-dursley-cluster\\_opt.pdf](https://www.stroud.gov.uk/media/1070618/cluster-analysis-part-2-v5_cam-and-dursley-cluster_opt.pdf)

<sup>78</sup>Ethos Planning (2019) Stroud Open Space and Green Infrastructure Study (The Gloucester Fringe Cluster Sub Area Analysis). Available: [https://www.stroud.gov.uk/media/1070623/cluster-analysis-part-2-v5\\_gloucester-fringe-cluster.pdf](https://www.stroud.gov.uk/media/1070623/cluster-analysis-part-2-v5_gloucester-fringe-cluster.pdf)

The Gloucester Fringe includes designated sites at the Range Farm Fields SSSI and the Haresfield Beacon SSSI. Much of the eastern part of the Cluster is designated as AONB.

## The Severn Vale

Table 1 of the Stroud Open Space and Green Infrastructure Study (Severn Vale Cluster Sub Area Analysis<sup>79</sup>) outlines that there is currently sufficient supply of all open space types, except for youth play space, of which there is a significant undersupply.

13 open spaces were assessed as part of the study. These were generally of good or moderate quality.

The Severn Vale includes the Severn Estuary, much of which is designated at this location, either as nationally as the Severn Estuary or Upper Severn Estuary SSSI, and internationally as a European Marine Site (Special Protection Area or SPA) and SAC under EU Directives and has status as a globally important wetland as a designated Ramsar site. The SAC and SPA designations are due to the Severn's estuary habitat, including mudflats, sandflats and Atlantic salt meadows and its important bird and fish populations.

The Severn Vale Cluster also includes the Frampton Pools SSSI.

## The Berkeley Cluster

Table 1 of Berkeley Cluster Sub Area Analysis Report<sup>80</sup> there is a sufficient supply of allotments, amenity green space, and children's play space. There is an undersupply of parks and recreation grounds and youth play space.

25 open space and play areas were assessed and were generally considered to be of good quality. A handful of sites were of moderate quality and one was of poor quality (Hamfields Leisure Play Area).

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<sup>79</sup> Ethos Planning (2019) Stroud Open Space and Green Infrastructure Study (Severn Vale Cluster Sub Area Analysis). Available: [https://www.stroud.gov.uk/media/1070622/cluster-analysis-part-2-v5\\_severn-vale-cluster.pdf](https://www.stroud.gov.uk/media/1070622/cluster-analysis-part-2-v5_severn-vale-cluster.pdf)

Berkeley Cluster includes the Severn Estuary, which is designated as a SPA, SAC, Ramsar site and as a SSSI.

Much of the Severn Vale cluster is designated as a Strategic Nature Area (SNA) consisting of wet grassland habitat and has a higher than average concentration of existing wildlife habitat. This SNA is defined by the Local Nature Partnership as a strategic county green infrastructure corridor. This part of Severn Vale is also partly designated as a Nature Improvement Area.

The land from Frampton Moors to Berkeley via the Meadows LWS and Bushy Grove is identified within the Open Space and Green Infrastructure Study as a strategic district green infrastructure corridor.

The Berkeley Cluster includes the Purton Passage SSSI.

## The Wotton Cluster

Table 1 of the Wotton Cluster Sub Area Analysis Report<sup>81</sup> outlines that there is an undersupply of all types of open space and play space across the area apart from for parks and recreation grounds.

18 open spaces and play spaces were assessed as part of the study. 17 were considered to be of good quality, with one being of poor quality (Pitman Place Play Area).

The Wotton Cluster includes the Nibley Knoll, Wotton Hill and Combe Hill SSSIs.

<sup>80</sup> Ethos Planning (2019) Stroud Open Space and Green Infrastructure Study (Berkeley Cluster Sub Area Analysis). Available: [https://www.stroud.gov.uk/media/1070619/cluster-analysis-part-2-v5\\_berkeley-cluster.pdf](https://www.stroud.gov.uk/media/1070619/cluster-analysis-part-2-v5_berkeley-cluster.pdf)

<sup>81</sup> Ethos Planning (2019) Stroud Open Space and Green Infrastructure Study (Wotton Cluster Sub Area Analysis). Available: [https://www.stroud.gov.uk/media/1070625/cluster-analysis-part-2-v5\\_wotton-cluster.pdf](https://www.stroud.gov.uk/media/1070625/cluster-analysis-part-2-v5_wotton-cluster.pdf)

## The Cotswold Cluster

The Cotswold Cluster has a sufficient<sup>82</sup> supply of allotments, parks and recreation grounds and child play space. There is an undersupply of amenity green space and youth play space in the cluster.

A total of 13 open spaces were audited as part of the Open Space and Green Infrastructure Study. These were all assessed as being of good quality.

The Cotswold Beechwoods SAC and National Nature Reserve is located within the Cotswold Cluster. It is designated as one of the most extensive blocks of beech forests in the UK.

The Cotswold Escarpment and Valley Strategic Nature Area is located within the Cotswold Cluster, and consist of lowland grassland and woodland wildlife habitats. This area is also designated as a strategic county green infrastructure corridor by the Local Nature Partnership, which extends from Wotton-under-Edge in the south, up through the Stroud Valleys to Painswick and beyond to the east of Gloucester.

The Cotswold Valleys Nature Improvement Area is an ecological network consisting of the river valley systems of the Evenlode, Windrush, Leach, Coln, Churn and the By Brook.

The Cotswold Cluster includes a strategic district green infrastructure corridor stretching from Standish Park/Wood to Cotswold Commons and Beechwoods SAC and SSSI.

Other statutory designated sites in the Cotswold Cluster include:

- Bulls Cross, the Frith and Juniper Hill SSSI
- Rough Bank SSSI, Miserden
- Edge Common SSSI

<sup>82</sup> Ethos Planning (2019) Stroud Open Space and Green Infrastructure Study (Cotswold Cluster Sub Area Analysis). Available: [https://www.stroud.gov.uk/media/1070620/cluster-analysis-part-2-v5\\_cotswold-cluster.pdf](https://www.stroud.gov.uk/media/1070620/cluster-analysis-part-2-v5_cotswold-cluster.pdf)

- Daneway Banks SSSI
- Swift’s Hill SSSI

## Planned Provision and Scheme Identification based on revised Housing and Employment Needs

### District-wide requirements and standards

The Open Space and Green Infrastructure study defines standards and key principles for future provision of green infrastructure and open space informed by the assessment of local needs and audit of existing local space. The standards are informed by resident and stakeholder surveys and consider previous evidence<sup>83</sup> for the 2015 Local Plan which used the Fields in Trust (FIT) Six Acre Standard.

The standards for new development are outlined below. Demand figures are set out per 1000 population, whilst costs are per hectare.

Table 35 Open Space and Green Infrastructure Standards

| GI Typology                | GI Standards    |             |
|----------------------------|-----------------|-------------|
|                            | Allotments      | Demand (ha) |
| Cost (£ per ha)            |                 | £223,400    |
| Community Orchards         | Demand (ha)     | 0.15        |
|                            | Cost (£ per ha) | £202,400    |
| Amenity Green Space        | Demand (ha)     | 0.4         |
|                            | Cost (£ per ha) | £202,400    |
| Parks & Recreation Grounds | Demand (ha)     | 1.2         |
|                            | Cost (£ per ha) | £929,400    |

<sup>83</sup> The 2013 Outdoor Playing Space – A Survey of Local Provision and Needs and the 2014 version of IDP.

| GI Typology                    | GI Standards    |            |
|--------------------------------|-----------------|------------|
| Play Space                     | Demand (ha)     | 0.06       |
|                                | Cost (£ per ha) | £1,687,600 |
| Accessible Natural Green Space | Demand (ha)     | 1          |
|                                | Cost (£ per ha) | £202,400   |

The Open Space and Green Infrastructure study sets out overarching options for the management and improvement of open spaces and considers the future need for open space within each of the cluster analysis reports. These needs are included within this section of the report alongside feedback from consultation with Gloucestershire County Council, Stroud District Council and Natural England in May 2020.

Generally, the initial approach should be to protect and enhance all open spaces. Where open spaces do not meet the needs of local communities or might be surplus to requirements, opportunities for relocation and re-designation of open spaces should be considered. The Playing Pitch Strategy and the Sport and Recreation Chapter of the IDP outlines an approach to the creation of health and wellbeing ‘hubs’, which could include new open space and green infrastructure.

When new development comes forward, it should seek to identify areas for new provision, or, where appropriate, contribute to improving existing provision. New open spaces should be provided in accordance with the standards set out in Table 35. These standards have been applied to the proposed distribution of growth set out in the Pre-submission Draft Local Plan within Table 36 and Table 37. The red text in Table 36 and Table 37 denotes those sites that are not currently proposed to meet the housing needs of Stroud District Council.

As set out within the Scheme Delivery section, there are two mitigation strategies in place to manage and mitigate recreational impacts arising from new development on designated sites. These include the Severn Estuary SAC/SPA/Ramsar site and the Rodborough Common SAC. These strategies

define ‘Core Catchments’, within which developers are required to contribute towards mitigating potential adverse effects. The rates are: £200 per net dwelling for Rodborough Common (2015 rate) and £385 per dwelling for the Severn Estuary (2017 rate). An additional mitigation strategy is being developed for the Cotswold Beechwoods SAC and is due to be published alongside the Local Plan for Examination. The strategy will identify mitigation packages, a catchment and rates for contributions..

Following consultation with Natural England both as part of the Draft Local Plan (Jan 2020) and the IDP (May 2020), the existing recreation strategies for the Severn Estuary SAC/SPA/Ramsar Site and Rodborough Common SAC are currently being updated (May 2021).

The Sustainability Appraisal<sup>84</sup> has highlighted that the levels of development set out in the Local Plan Review could lead to potentially significant adverse effects upon the aforementioned designated sites.

There is an expectation that developments secure biodiversity net gain as set out in Policies CP14 ‘High quality sustainable development’ and ES6 ‘Providing for biodiversity and geodiversity’. In absence of a local metric, developers should utilise the Natural England Biodiversity Metric<sup>85</sup> to measure and account for biodiversity losses and gains and should work with Stroud District Council officers to develop schemes to increase biodiversity.

The remainder of this chapter sets out the implications per parish cluster and by site.

<sup>84</sup> LUC (2019) Sustainability Appraisal Report for the Stroud District Local Plan Review – Draft Plan. Available: [https://www.stroud.gov.uk/media/1120827/final-sa-report-for-stroud-district-local-plan-review\\_-\\_draft-plan-november-2019-redacted.pdf](https://www.stroud.gov.uk/media/1120827/final-sa-report-for-stroud-district-local-plan-review_-_draft-plan-november-2019-redacted.pdf)

<sup>85</sup> Natural England (2019) The Biodiversity Metric 2.0. Available: <http://publications.naturalengland.org.uk/publication/5850908674228224>

Table 36 Open Space and Green Infrastructure Requirements (part a)

| Ref                     | Site Allocation                              | Ward Cluster             | Housing Delivery to 2040 | Population   | Allotments  |                   | Community Orchards |                 | Amenity Green Space |                   |
|-------------------------|--|--------------------------|--------------------------|--------------|-------------|-------------------|--------------------|-----------------|---------------------|-------------------|
|                         |  |                          |                          |              | Demand (ha) | Cost (£)          | Demand (ha)        | Cost (£)        | Demand (ha)         | Cost (£)          |
| PS24                    | Cam North West (West of Draycott)            | Cam & Dursley            | 900                      | 2115         | 0.74        | £165,372          | 0.32               | £64,211         | 0.85                | £171,230          |
| PS25                    | Cam North East Extension (East of River Cam) | Cam & Dursley            | 180                      | 423          | 0.15        | £33,074           | 0.06               | £12,842         | 0.17                | £34,246           |
| PS28                    | Dursley                                      | Cam & Dursley            | 10                       | 24           | 0.01        | £1,837            | 0.00               | £713            | 0.01                | £1,903            |
| PS19a                   | Stonehouse North West                        | Stonehouse Cluster       | 700                      | 1645         | 0.58        | £128,623          | 0.25               | £49,942         | 0.66                | £133,179          |
| PS16 & PS42             | Leonard Stanley                              | Stonehouse Cluster       | 40                       | 94           | 0.03        | £7,350            | 0.01               | £2,854          | 0.04                | £7,610            |
| PS17                    | Stonehouse                                   | Stonehouse Cluster       | 10                       | 24           | 0.01        | £1,837            | 0.00               | £713            | 0.01                | £1,903            |
| PS01 & PS02             | Brimscombe & Thrupp                          | Stroud Valleys           | 190                      | 447          | 0.16        | £34,912           | 0.07               | £13,556         | 0.18                | £36,149           |
| PS05                    | Minchinhampton                               | Stroud Valleys           | 80                       | 188          | 0.07        | £14,700           | 0.03               | £5,708          | 0.08                | £15,220           |
| PS06 & PS07             | Nailsworth                                   | Stroud Valleys           | 90                       | 212          | 0.07        | £16,537           | 0.03               | £6,421          | 0.08                | £17,123           |
| PS10, PS11, PS12 & PS13 | Stroud                                       | Stroud Valleys           | 165                      | 388          | 0.14        | £30,318           | 0.06               | £11,772         | 0.16                | £31,392           |
| PS34                    | Sharpness Docks                              | Berkeley Cluster         | 300                      | 705          | 0.25        | £55,124           | 0.11               | £21,404         | 0.28                | £57,077           |
| PS36                    | Sharpness (Garden Village)                   | Berkeley Cluster         | 2400                     | 5640         | 1.97        | £440,992          | 0.85               | £171,230        | 2.26                | £456,614          |
| PS37                    | Wisloe (Garden Village)                      | Berkeley Cluster         | 1500                     | 3525         | 1.23        | £275,620          | 0.53               | £107,019        | 1.41                | £285,384          |
| PS33                    | Berkeley                                     | Berkeley Cluster         | 170                      | 400          | 0.14        | £31,237           | 0.06               | £12,129         | 0.16                | £32,344           |
| PS35                    | Newtown & Sharpness                          | Berkeley Cluster         | 70                       | 165          | 0.06        | £12,862           | 0.02               | £4,994          | 0.07                | £13,318           |
| PS41                    | Painswick                                    | Cotswold Cluster         | 20                       | 47           | 0.02        | £3,675            | 0.01               | £1,427          | 0.02                | £3,805            |
| G1                      | South of Hardwicke                           | Gloucester Fringe        | 1350                     | 3173         | 1.11        | £248,058          | 0.48               | £96,317         | 1.27                | £256,846          |
| PS30                    | Hunts Grove Extension                        | Gloucester Fringe        | 750                      | 1763         | 0.62        | £137,810          | 0.26               | £53,510         | 0.71                | £142,692          |
| HAR017                  | Hardwicke                                    | Gloucester Fringe        | 10                       | 24           | 0.01        | £1,837            | 0.00               | £713            | 0.01                | £1,903            |
| <b>G2</b>               | <b>Land at Whaddon</b>                       | <b>Gloucester Fringe</b> | <b>3000</b>              | <b>7050</b>  | <b>2.47</b> | <b>£551,240</b>   | <b>1.06</b>        | <b>£214,038</b> | <b>2.82</b>         | <b>£570,768</b>   |
| PS44                    | Frampton-on-Severn                           | The Severn Vale          | 30                       | 71           | 0.02        | £5,512            | 0.01               | £2,140          | 0.03                | £5,708            |
| PS45 & PS46             | Whitminster                                  | The Severn Vale          | 50                       | 118          | 0.04        | £9,187            | 0.02               | £3,567          | 0.05                | £9,513            |
| PS38                    | Kingswood                                    | The Wotton Cluster       | 50                       | 118          | 0.04        | £9,187            | 0.02               | £3,567          | 0.05                | £9,513            |
| <b>TOTAL</b>            |  |                          | <b>12065</b>             | <b>28353</b> | <b>9.88</b> | <b>£2,207,714</b> | <b>4.24</b>        | <b>£857,222</b> | <b>11.29</b>        | <b>£2,285,926</b> |

Table 37 Open Space and Green Infrastructure Requirements (part b)

| Ref                     | Site Allocation                              | Ward Cluster       | Housing Delivery to 2040 | Population | Parks & Recreation Grounds |            | Play Space  |          | Accessible Natural Green Space |            | Designated Sites Contribution |
|-------------------------|--|--------------------|--------------------------|------------|----------------------------|------------|-------------|----------|--------------------------------|------------|-------------------------------|
|                         |  |                    |                          |            | Demand (ha)                | Cost (£)   | Demand (ha) | Cost (£) | Demand (ha)                    | Cost (£)   | Cost (£)                      |
| PS24                    | Cam North West (West of Draycott)            | Cam & Dursley      | 900                      | 2115       | 2.54                       | £2,358,817 | 0.13        | £214,156 | 2.12                           | £428,076   | £346,500                      |
| PS25                    | Cam North East Extension (East of River Cam) | Cam & Dursley      | 180                      | 423        | 0.51                       | £471,763   | 0.03        | £42,831  | 0.42                           | £85,615    | £69,300                       |
| PS28                    | Dursley                                      | Cam & Dursley      | 10                       | 24         | 0.03                       | £26,209    | 0.001       | £2,380   | 0.02                           | £4,756     | £0                            |
| PS19a                   | Stonehouse North West                        | Stonehouse Cluster | 700                      | 1645       | 1.97                       | £1,834,636 | 0.10        | £166,566 | 1.65                           | £332,948   | £269,500                      |
| PS16 & PS42             | Leonard Stanley                              | Stonehouse Cluster | 40                       | 94         | 0.11                       | £104,836   | 0.01        | £9,518   | 0.09                           | £19,026    | £15,400                       |
| PS17                    | Stonehouse                                   | Stonehouse Cluster | 10                       | 24         | 0.03                       | £26,209    | 0.001       | £2,380   | 0.02                           | £4,756     | £0                            |
| PS01 & PS02             | Brimscombe & Thrupp                          | Stroud Valleys     | 190                      | 447        | 0.54                       | £497,973   | 0.03        | £45,211  | 0.45                           | £90,372    | £38,000                       |
| PS05                    | Minchinhampton                               | Stroud Valleys     | 80                       | 188        | 0.23                       | £209,673   | 0.01        | £19,036  | 0.19                           | £38,051    | £16,000                       |
| PS06 & PS07             | Nailsworth                                   | Stroud Valleys     | 90                       | 212        | 0.25                       | £235,882   | 0.01        | £21,416  | 0.21                           | £42,808    | £18,000                       |
| PS10, PS11, PS12 & PS13 | Stroud                                       | Stroud Valleys     | 165                      | 388        | 0.47                       | £432,450   | 0.02        | £39,262  | 0.39                           | £78,481    | £33,000                       |
| PS34                    | Sharpness Docks                              | Berkeley Cluster   | 300                      | 705        | 0.85                       | £786,272   | 0.04        | £71,385  | 0.71                           | £142,692   | £115,500                      |
| PS36                    | Sharpness (Garden Village)                   | Berkeley Cluster   | 2400                     | 5640       | 6.77                       | £6,290,179 | 0.34        | £571,084 | 5.64                           | £1,141,536 | £924,000                      |
| PS37                    | Wisloe (Garden Village)                      | Berkeley Cluster   | 1500                     | 3525       | 4.23                       | £3,931,362 | 0.21        | £356,927 | 3.53                           | £713,460   | £577,500                      |
| PS33                    | Berkeley                                     | Berkeley Cluster   | 170                      | 400        | 0.48                       | £445,554   | 0.02        | £40,452  | 0.40                           | £80,859    | £65,450                       |
| PS35                    | Newtown & Sharpness                          | Berkeley Cluster   | 70                       | 165        | 0.20                       | £183,464   | 0.01        | £16,657  | 0.16                           | £33,295    | £26,950                       |
| PS41                    | Painswick                                    | Cotswold Cluster   | 20                       | 47         | 0.06                       | £52,418    | 0.003       | £4,759   | 0.05                           | £9,513     | £0                            |
| G1                      | South of Hardwicke                           | Gloucester Fringe  | 1350                     | 3173       | 3.81                       | £3,538,226 | 0.19        | £321,235 | 3.17                           | £642,114   | £519,750                      |
| PS30                    | Hunts Grove Extension                        | Gloucester Fringe  | 750                      | 1763       | 2.12                       | £1,965,681 | 0.11        | £178,464 | 1.76                           | £356,730   | £288,750                      |



| Ref          | Site Allocation    | Ward Cluster       | Housing Delivery to 2040 | Population   | Parks & Recreation Grounds |                    | Play Space  |                   | Accessible Natural Green Space |                   | Designated Sites Contribution |
|--------------|--------------------|--------------------|--------------------------|--------------|----------------------------|--------------------|-------------|-------------------|--------------------------------|-------------------|-------------------------------|
|              |                    |                    |                          |              | Demand (ha)                | Cost (£)           | Demand (ha) | Cost (£)          | Demand (ha)                    | Cost (£)          | Cost (£)                      |
| HAR017       | Hardwicke          | Gloucester Fringe  | 10                       | 24           | 0.03                       | £26,209            | 0.001       | £2,380            | 0.02                           | £4,756            | £3,850                        |
| G2           | Land at Whaddon    | Gloucester Fringe  | 3000                     | 7050         | 8.46                       | £7,862,724         | 0.42        | £713,855          | 7.05                           | £1,426,920        | £0                            |
| PS44         | Frampton-on-Severn | The Severn Vale    | 30                       | 71           | 0.08                       | £78,627            | 0.004       | £7,139            | 0.07                           | £14,269           | £11,550                       |
| PS45 & PS46  | Whitminster        | The Severn Vale    | 50                       | 118          | 0.14                       | £131,045           | 0.01        | £11,898           | 0.12                           | £23,782           | £19,250                       |
| PS38         | Kingswood          | The Wotton Cluster | 50                       | 118          | 0.14                       | £131,045           | 0.01        | £11,898           | 0.12                           | £23,782           | £0                            |
| <b>TOTAL</b> |                    |                    | <b>12065</b>             | <b>28353</b> | <b>33.88</b>               | <b>£31,490,210</b> | <b>1.69</b> | <b>£2,858,988</b> | <b>28.24</b>                   | <b>£5,714,815</b> | <b>£3,358,250</b>             |

\*Red text denotes those sites that are not currently proposed to meet the housing needs of Stroud District Council.

\*\* The Designated Sites Contributions do not yet include the costs associated with the Cotswolds Beechwoods Mitigation Strategy.

## The Stroud Valleys

The Open Space and Green Infrastructure Study has identified whilst many of the open spaces in Stroud Valleys are of good quality, there is currently an undersupply of amenity green spaces, parks and recreation grounds and play space within the sub area.

It is estimated that the nine proposed local development sites within Stroud Valleys, totalling 525 dwellings, would **require an additional 3.9 hectares of open space and green infrastructure**. Whilst it is expected that open space should be provided onsite where possible, applying the cost standards to this level of growth, there would be **a cost of £1.98m**.

The Cluster Analysis highlights that the Brimscombe Mill and Brimscombe Port allocations should seek to incorporate existing assets such as the canal and achieve environmental enhancements and to create a restored mill pond. These sites are near the London Road open space, which is identified within the Open Space and Green as needing improvement.

Sites in Minchinhampton and Nailsworth should include onsite open space and strategic landscaping. Open space should also be integrated into the Central river / canal corridor local development site.

Key opportunities for these sites are listed within the Stroud Valleys Cluster Analysis as:

- Protect and restore canal and river corridors for biodiversity and cycle and pedestrian access.
- Improve connectivity and quality of priority habitats, including deciduous woodland, calcareous grassland and good quality semi-improved grassland. Identified by Natural England as a Fragmentation Action Zone.
- Enhance connectivity of fragmented woodland habitats and associated access improvements to existing PRoW network.
- Enhance connectivity of priority habitats, including fragmented deciduous woodland and associated access improvements to existing PRoW network.

All four settlements are located within the Core Catchment of the Rodborough Common SAC Mitigation Strategy. This Strategy is being reviewed and updated to take account of potential adverse impacts on the SAC. Notwithstanding this, based on the existing requirements of the Strategy, it is expected that contributions towards mitigation from the four sites would total circa £128,000. Contributions may also be required to mitigate recreational impacts upon the Cotswold Beechwoods SAC.

## The Stonehouse Cluster

In terms of existing provision, there is generally sufficient supply of open spaces in the Stonehouse Cluster and these are largely good quality. This does not, however, mean there is a surplus of spaces in the sub area.

It is estimated that the 750 dwellings across four sites would **require an additional 5.5 hectares of open space and green infrastructure**. If to be provided via financial contribution, it is estimated that there would be **a cost of £2.8m**.

Given its size, it is expected that open space at the Northwest of Stonehouse strategic development site should be provided onsite.

The site, alongside the existing Great Oldbury allocation, will provide accessible natural green space, allotments and formal public outdoor playing space, structural landscaping buffer incorporating existing hedgerows and trees, long term management and maintenance of open spaces to deliver local biodiversity targets, SuDS, restored water course corridor that enhances biodiversity and water quality and improves flood storage and flow rates, cycle and pedestrian routes, including improvements to canal towpath.

Strategic landscaping should be incorporated into the M5 Junction 13 strategic employment site allocation to mitigate visual impacts.

Key opportunities listed within the Stonehouse Cluster analysis include:

- Improve connectivity between grassland and woodland priority habitats
- Ongoing restoration work from Stonehouse to Thrupp along Stroudwater Canal. Protect and enhance River Frome corridor

The Stonehouse North West and Leonard Stanley development sites both sit within the Severn Estuary Mitigation Strategy Core Catchment. It is estimated that these sites would generate contributions of approximately £285,000 at current rates. This does not consider any revisions to the Strategy or potential changes to rates. Contributions may also be required to mitigate recreational impacts upon the Cotswold Beechwoods SAC.

### Cam & Dursley

There is generally an undersupply of open spaces in the Cam & Dursley Cluster, and many of the existing spaces are of less than good quality.

It is estimated that a **total of 8.1 hectares of open space is required** to respond to the growth set out in the Pre-submission Draft Local Plan of 1090 additional dwellings. This is estimated at a **cost of £4.1m**.

The North East of Cam strategic development site, alongside the existing allocation, will provide a landscaped linear park including footpath along the River Cam and enhanced flood plain storage capacity. It will also include accessible natural green space and public outdoor playing space, structural landscape buffer to the south east of the development. An active travel link to the Cam and Dursley railway station and an extension of the Cam and Dursley Greenway cycle route will be provided.

The North West of Cam strategic development site will provide onsite open space and green infrastructure, including a strategic landscape buffer along the western edge of the site.

The key opportunities for enhancing connectivity to green infrastructure identified in the Open Space and Green Infrastructure Study include:

- Biodiversity and access improvements from SA3 allocation to River Cam corridor, in line with policy SA3.
- Proposed Cam, Dursley & Uley Greenway.

Both the Cam North West and North East urban extensions and the Cam local development site are located within the Severn Estuary Mitigation Strategy Core

Catchment. Notwithstanding the review of this Strategy, it is expected that these sites should provide contributions of around £415,000.

### The Gloucester Fringe

Currently there is an undersupply of open spaces in Gloucester Fringe. Existing open spaces are generally of good quality.

It is estimated that a **total of 38 hectares of open space and green infrastructure is required** to respond to the growth set out in the Pre-submission Draft Local Plan of 5110 additional dwellings. Whilst it is expected that this will be provided onsite at the expense of the developer, **the total cost of contributions is estimated at £19.3m**. These requirements include the Land at Whaddon strategic development site.

It is expected that the Hunts Grove Extension provides open space in the form of accessible natural greenspace and publicly accessible outdoor playing space, structural landscaping buffer incorporating existing hedgerows and trees, SuDs, cycle and pedestrian routes.

The South of Hardwicke site should provide green infrastructure, open space and strategic landscaping onsite. The proximity of the site to the Gloucester and Sharpness Canal creates opportunities for a biodiversity and recreation corridor. Connections to the Canal should be improved along the existing PRoW.

There are no existing open spaces identified within the Open Space and Green Infrastructure Study close to the Land at Whaddon. It is expected that the site should provide green infrastructure, open space and strategic landscaping onsite.

The South of M5 J12 (Quedgeley East) strategic development site will provide contributions to pedestrian and cycle links and floodplain storage.

Key opportunities for enhancing the connectivity of the network have been identified as follows:

- Connect SA4a allocation via Haresfield to Cotswold Way, focusing on connecting traditional orchards and deciduous woodland. Improve access along PRoW network which is currently fragmented.

- Improve access from SA4 allocation to Gloucester and Sharpness Canal along existing PRoW, with associated biodiversity enhancements.
- Protect, enhance and connect priority habitats, including lowland meadows, calcareous grasslands, deciduous woodlands and traditional orchards.
- Potential to improve access from Brockworth to priority habitat woodlands to the south, incorporating biodiversity enhancements to connect existing traditional orchards and deciduous woodland.
- Biodiversity and recreation corridor along Gloucester and Sharpness Canal, opportunities for recreation and tourism in line with local plan. Protect and enhance connectivity of priority habitats including floodplain grazing marsh and traditional orchards.

The South of Hardwicke and Hunts Grove Extension sites are both located within the Severn Estuary Mitigation Strategy Core Catchment. Notwithstanding the review of this Strategy, it is expected that these sites would provide approximately £812,000 of contributions to mitigating recreational impacts. Contributions may also be required to mitigate recreational impacts upon the Cotswold Beechwoods SAC.

## The Berkeley Cluster

There is currently an undersupply of parks and recreation grounds and youth play space in the Berkeley Cluster, with a good supply of other open spaces.

It is estimated that based on the levels of growth set out in the Pre-submission Draft Local Plan of 4,440 new dwellings, there would be a **requirement for 33 hectares of open space** within development sites. Whilst the policy position is to provide onsite open space, it is estimated that off-site contributions to open space and green infrastructure would be at **a cost to the developer of £16.8m**.

The Open Space and Green Infrastructure Study outlines that the Sharpness Docks site will deliver a community football pitch, community gardens, informal green space, landscaping incorporating existing hedgerows and trees, SuDS and cycle and pedestrian routes. This site should protect and enhance existing SSSI and LWS at Purton Hulks and Purton Timber Ponds.

It is expected that the Sharpness Garden Village strategic development site provides open space uses, strategic green infrastructure and landscaping. Opportunities for local food production would also be supported.

Significant concerns have been raised about the potential for adverse impacts resulting from the Sharpness Garden Village strategic development site upon designated sites. In its response to the Draft Local Plan consultation, Natural England highlighted that the development had the potential to adversely affect the integrity of the Severn Estuary SAC/SPA/Ramsar site.

Modelling in collaboration with the Environment Agency will be required to understand the implications of climate change on sea level rises and the potential risk of coastal squeeze. If this was to occur it would lead to the loss of designated intertidal habitats and have an adverse impact on wintering birds in the area, to which Natural England object.

The Sharpness Garden Village would also likely have significant recreational impacts on the designated sites. These impacts may go beyond those assessed within the existing Severn Estuary Recreation & Mitigation Strategy and further work is required to understand implications and to develop appropriate mitigation.

Concerns were raised by Natural England during consultation in May 2021 that as population concentrations increase in proximity of the Severn Estuary, the likely impacts are to increase in intensity. The Covid-19 pandemic may have also altered habits and intensified impacts upon designated sites. This reiterates the need to update mitigation strategies.

The developer for the Garden Village has developed a schematic proposal for a combined approach for suitable alternative natural green space (SANGs) and onsite open space, however work is ongoing to develop a baseline of bird survey data to understand whether this proposal for a new nature reserve close to the sea wall would be sufficient.

It is expected that any application at Sharpness is accompanied by a Habitats Regulations Assessment and identifies relevant, costed mitigation from the mitigation strategies in the heads of terms for a s.106 agreement.

It is expected that open space and green infrastructure will be integrated into the Wisloe Garden Village development. Contributions will be required towards mitigating recreational impacts associated with the Severn Estuary designated sites.

Opportunities for enhancing the connectivity of the green infrastructure network have also been identified in the Berkeley Cluster Analysis as follows:

- Improvements to cycle and pedestrian routes in line with SA5 allocation. Protect and enhance Purton Hulks SSSI and Purton Timber Ponds Key Wildlife Site. This area has also been identified by Natural England as a Fragmentation Action Zone.
- Potential to improve connectivity between various traditional orchards e.g. through wildflower margins to provide corridors for pollinators
- Potential to improve PRow and protect and enhance stream and associated habitats between Berkeley Heath Water Meadows and Berkeley Castle grounds (both coastal floodplain grazing marsh priority habitat). In addition, protect and enhance adjoining priority habitats further north (semi-improved grasslands, purple moor grass and rush pastures and lowland meadows).
- Improvements to biodiversity/flood defences from South of Severn Distribution Park (SA5a) employment allocation and potential link for wildlife to LWSs such as Tintock Wood and Berkeley Meadow. Also identified by Natural England as a Potential Network Join. Potential to link allocation to existing cycle route to the east.
- Identified in Local Plan Review to improve walking and cycling connectivity (which should protect and incorporate habitat for the dispersal of wildlife).
- Proposed Cam, Dursley & Uley Greenway.
- Protect and enhance Gloucester and Sharpness Canal corridor for biodiversity and access.

- Appointment of a Warden to implement the Severn Estuary Mitigation Strategy, as per Rodborough Common.

In advance of the further work needed to understand recreational impacts upon designated sites, it has been estimated that development would be required to contribute £1.69m towards the Severn Estuary Mitigation Strategy. This figure is preliminary and based on 2017 rates.

## The Severn Vale

There is generally sufficient supply of open space in the Severn Vale of good to moderate quality compared to existing needs. There is an undersupply of youth play space compared to existing needs.

It is estimated that a total of **0.6 hectares of open space is required to respond to the needs** arising from the 80 proposed dwellings in the Cluster.

The Open Space and Green Infrastructure study considers the green infrastructure requirements for the local development sites to be limited, however the opportunity to reinstate the derelict canal between Stonehouse and Saul Junction is supported.

Opportunities for enhancing the connectivity of the green infrastructure network identified within the Severn Vale Cluster Analysis include:

- Key link for retaining and improving hedgerows, ensure numerous traditional orchards are protected. (Corridor linking Arlingham, Framilode, Longney and Elmore)
- Restore derelict canal between Stonehouse and Saul Junction.
- Protect and enhance Gloucester and Sharpness Canal corridor for biodiversity and access.
- Biodiversity and recreation corridor along Gloucester and Sharpness Canal, opportunities for recreation and tourism in line with local plan. Protect and

enhance connectivity of priority habitats including floodplain grazing marsh and traditional orchards.

The sites are all located within the Severn Estuary Recreation & Mitigation Strategy Core Catchment and on the basis of the existing rates, would be required to make £893,000 worth of contributions to the Strategy.

### The Wotton Cluster

There is an undersupply of all types of open space and play space across the area apart from for parks and recreation grounds, however existing open spaces are of good quality.

A total of 50 homes are proposed within the Wotton Cluster. It is estimated that **a total of 0.37 hectares of open space would be required** to meet the needs of future residents. If to be provided via contribution, it is estimated that this would be at **a cost of £189,000**.

The Land west of Renishaw New Mills strategic employment development site should incorporate strategic landscaping. The South of Wickwar Road local housing development site should incorporate open space and green infrastructure onsite.

Opportunities for enhancing green infrastructure identified within the Wotton Cluster Analysis include:

- Protect, enhance and connect fragmented calcareous grassland.
- Biodiversity improvements to Monarch Way to link habitats (hedge/tree planting).
- Link priority habitats including deciduous woodlands and semi-improved grassland via traditional orchards. Potential access improvements along existing PRow

Both sites are outside of the Mitigation Strategy Core Catchments.

### The Cotswold Cluster

There are mixed levels of coverage in terms of quantity of open spaces in the Cotswold Cluster, however those sites that are accessible are all of good quality.

It is estimated that a **total of 0.15 hectares of open space would be required** to meet the needs of residents from the 20 additional homes proposed in Painswick. If to be provided via contribution, this would **total £76,000**.

The Washwell Fields site, Painswick includes an allocation for open spaces and strategic landscaping. It is expected that this is provided onsite.

Opportunities for enhancing green infrastructure identified within the Wotton Cluster Analysis include:

- Connect Keensgrove Wood and Catswood LWS (ancient woodland) to Lypiatt Park, this is a Potential Network Join identified by Natural England.
- Strengthen connectivity of deciduous woodland (priority habitat).

The Painswick site is outside the Core Catchments for both the Severn Estuary and Rodborough Common Mitigation Strategy. Painswick is within 2 miles of the Cotswold Beechwoods SAC, and could result in recreational impacts upon the designated site which may need to be mitigated through a future strategy.

Consideration should be given to potential air quality impacts upon the Cotswold Beechwoods SAC arising from development. It is expected that Air Quality Assessments are undertaken on major sites in the mitigation areas and fed into the Habitat Regulations assessment (if undertaken). Mitigation may be required to address impacts, including site nitrogen action plans; landscape design and vegetation barriers; sustainable transport measures to reduce vehicle demand and speed limit reductions onsite.

### Sector-specific Funding

It is expected that on-site open space and green infrastructure is funded and delivered by developers in accordance with the standards set out in the Open Space and Green Infrastructure Study.

The existing Mitigation Strategies for Rodborough Common and the Severn Estuary have secured monies for a range of projects to limit recreational impacts on designated sites and it is expected that this will be extended to continue to fund future mitigation. The development of a Cotswolds Beechwoods Mitigation Strategy will support investment in projects to mitigate recreational impacts on the designated site.

The CIL and s.106 contributions can both be utilised to deliver off-site improvements to green infrastructure where necessary. It is proposed that s.106 agreements will be utilised to mitigate development impacts relating to strategic development locations and CIL will be used to deliver off-site green infrastructure.

It is anticipated that capital funding for open space will be limited.

## Conclusions

Where possible, open space and green infrastructure should be integrated into development proposals and be included onsite in accordance with the standards set out in the Open Space and Green Infrastructure Study.

The importance of having informal recreation space within Stroud has been highlighted by Natural England. This will help to reduce recreational pressures on designated sites, and priority species-rich habitats. It is recommended that developments provide new informal spaces or improve existing areas.

Development proposals will provide an overall net gain in biodiversity through enhancement and creation of ecological networks within and connecting with those beyond the district. This will be guided by the Local Nature Partnership's new Nature Recovery Network and the Natural Capital Baseline which will identify priority areas for action where net gain should be delivered. It is likely both guides will be in place by the end of 2021.

Development that adversely effects locally, nationally or internationally designated sites will not be supported.

The existing mitigation strategies for Rodborough Common and the Severn Estuary have successfully helped to limit recreational impacts from development, however these must be reviewed to ensure that they are effective. An additional mitigation strategy will be published in summer 2021 for Cotswold Beechwoods to implement similar measures to address recreational impacts.



## 9 Infrastructure Assessment: Sport and Recreation

### Responsibility for delivery

This section covers the provision of both indoor leisure sports (including health and fitness facilities, sports halls, swimming pools and other indoor facilities) and playing pitches (including 3G AstroTurf pitches, football, rugby, tennis, bowls and multi-use games areas). Delivery of sports infrastructure is divided between the following organisations within Stroud.

| Service Provider               | Responsibility   |
|--------------------------------|--|
| <b>Sport England</b>           | Sport England is a public body under the Department for Digital, Culture, Media and Sport (DCMS). The body aims to enable access to sport and physical activity for all regardless of age, background or level of ability and develop grassroots sport across England. From 2009 to 2019, Sports England awarded funding to 33 projects across the Stroud District including extensions and redevelopment of new and existing sporting infrastructure. |
| <b>Everyone Active</b>         | Part of Sports and Leisure Management Ltd, Everyone Active are a leisure contractor that manage over 190 leisure and cultural centres across the UK in partnership with more than 60 different local authorities. Everyone Active are the contractor for the Stratford Park Leisure Centre managed by the Stroud District Council.   |
| <b>Stroud District Council</b> | Stroud District Council are responsible for development and maintenance of sports and recreation infrastructure in the Stroud District.  |
| <b>Active Gloucestershire</b>  | Active Gloucestershire are a charity part of a national network of county sport and 'Active Partnerships' operating across England. Active Gloucestershire's network includes a range of organisations and individuals to create a collaborative network of sport and recreation providers and delivery programmes across Gloucestershire to reduce physical inactivity.   |

### Overview of progress since the 2016 IDP

#### Literature, Policy and Strategy Changes

**The Stroud District IDP Refresh (2014):** The 'Open space, sport & recreation' chapter of the 2014 IDP set out the provision of a range of sports, leisure and amenity facilities including indoor facilities (swimming pools and sports halls) and outdoor playing pitches.

The 2014 IDP outlined that Stroud District Council run leisure centres at Dursley, Eastcombe, Stroud, Stonehouse and Wotton.

The Sport England Sports Facility Calculator (SFC) was used to quantify how much additional demand for key community sports facilities was generated by new development in Stroud.

The SFC found that the current level of provision for swimming pools is relatively low in consideration of the existing demand for around 5.7 pools (23 lanes). Future development within the Stroud Valleys and at North East Cam would be well served by existing facilities. Major developments proposed at Hunts Grove and West Stonehouse would be less well located in access to existing swimming facilities. It was recommended that further assessment was undertaken to understand whether new swimming pool facilities were required to support further development within the Stroud District and Gloucester City. The Gloucester Fringe was the cluster identified for the potential development of a future swimming pool.

A review of the existing sports halls facilities found that proposed allocations at North East Cam and Stroud Valleys are served by existing provision. Longer journeys to access sports facilities would be required for development at Hunts Grove and Sharpness. Provision of a sports hall in the Hunts Grove area was identified as a potential priority for development. An alternative approach would be to facilitate improvements to existing leisure and community centres across the District.

At the time of the preparation of the 2014 IDP, Stroud District Council were in the process of undertaking an audit of the district's open space. The emerging results found that there were substantial existing shortfalls in playing pitches

and outdoors sport provision in the Stroud Valleys and at Cam & Dursley. Smaller shortfalls were also evident in the Stonehouse and Gloucester Urban Fringe areas, while small surpluses have been recorded for the Cotswold Fringe and the Berkeley cluster area incorporating Sharpness.

Key needs identified for future sporting infrastructure in Stroud to respond to the growth set out in the 2015 Local Plan included:

- Additional demand for between 0.81 and 0.87 swimming pools (3.2 to 3.4 lanes).
- Additional demand for between 1.1 and 1.17 new sports halls (equivalent to approximately 4.5 courts).
- Population generated by new development could create a future need of between 20-21ha of playing pitches at a cost of £1.95 to £2.1 million.
- Population generated by new development could create a future need of between 6.7ha and 7.2ha of outdoor sport provision at an estimated cost of between £6.6 and 7.1 million.

### Changes since 2014 IDP: Overarching Documents

**Revised National Planning Policy Framework (2019):** The NPPF is underpinned by the principles of sustainable development, including the objective to ‘support strong, vibrant and healthy communities’ (paragraph 8).

Paragraph 20 requires strategic policies to set out an overall strategy for the pattern, scale and quality of development, and make sufficient provision for transport, security and community (inclusive of sport and recreation) facilities.

Paragraph 96 of the NPPF states that access to a network of high-quality open spaces and opportunities for sport and physical activity is important for the health and well-being of communities. Planning policies should be based on

robust and up-to-date assessments of the need for open space, sport and recreation facilities.

**Planning Practice Guidance (PPG):** The PPG provides additional context and guidance on a range of topics including health and wellbeing, open space, sports and recreational facilities. It includes detail on assessing the need for sports and recreational facilities, as well as when to consult statutory providers.

**Sporting Future – A New Strategy for an Active Nation (2015)<sup>86</sup>:** This cross-government strategy aims to increase levels of sport participation and high levels of inactivity across the UK. The Active Nation Strategy identifies five key outcomes: physical wellbeing, mental wellbeing, individual development, social and community development and economic development.

Infrastructure is identified as a key component to support a more sustainable and effective sport sector. The Strategy outlines that it is important that the wider built and natural environment is designed to make taking part in physical activity safer and easier.

The Strategy identifies a series of actions and approaches to delivering sports infrastructure, including: co-locating sport and other services; providing large-scale infrastructure which caters for multiple sports; improving the quality of community sports facilities in conjunction with local authorities; balancing the need for outdoor spaces and built facilities; making use of school facilities and updating procurement protocols to support health outcomes and provide consistency.

**Sport England Strategy – ‘Towards an Active Nation’ 2016-2021 (2016)<sup>87</sup>:** This strategy was produced in response to the Government’s ‘A New Strategy for an Active Nation’ and aims to focus money and resources on tackling inactivity, working nationally where it makes sense to do so (including infrastructure development) whilst encouraging stronger local collaboration.

<sup>86</sup> HM Government (2015) Sporting Future – A New Strategy for an Active Nation. Available: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/486622/Sporting\\_Future\\_ACCESSIBLE.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/486622/Sporting_Future_ACCESSIBLE.pdf)

<sup>87</sup> Sport England (2016) Towards an Active Nation. Available: <https://www.activehw.co.uk/uploads/sport-england-towards-an-active-nation.pdf>

‘Facilities’ is a new investment programme included in the Strategy. A commitment is made to continue to invest in all types of facilities, with a strong presumption in favour of multi-sport facilities considered major strategic investments. The investment strategy for facilities will focus on two areas:

- *Strategic Capital Programme* – for large, usually multi-sport facilities
- *Community Asset Fund* – offering grants of between £10,000-£150,000 to support and improve existing local infrastructure

**Stroud District Open Space and Green Infrastructure Study (2019)<sup>88</sup>:** The Study examines existing and projected needs for open space, green infrastructure, sport and recreation provision. The purpose of the Study is to support the preparation of the Council’s Local Plan Review and the Council’s decision-making process in relation to open space and Green Infrastructure provision up to 2040.

The Open Space and Green Infrastructure study was prepared in conjunction with the Stroud Community and Stakeholder Consultation Report (2018)<sup>89</sup> local needs assessment to provide an overview of open space and Green Infrastructure in the Stroud District.

Both documents outline the level of demand for existing and future sporting facilities and the criteria for assessment of strategic developments including:

- Existing provision to be protected;
- Existing provision to be enhanced;
- Opportunities for re-location/re-designation of open space (includes consideration of multifunctional strategic hubs of open space (includes consideration of multifunctional strategic hubs of open space/sports facilities);
- Identification of areas for new provision; and

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<sup>88</sup> Ethos (2019) Stroud District Open Space and Green Infrastructure Study. Available: [https://www.stroud.gov.uk/media/1070616/stroud-open-space-and-green-infrastructure-study-part-1-v4\\_opt.pdf](https://www.stroud.gov.uk/media/1070616/stroud-open-space-and-green-infrastructure-study-part-1-v4_opt.pdf)

<sup>89</sup> Ethos (2019) Stroud District Green Infrastructure, Sport and Recreation Study: Community and Stakeholder Consultation Report FINAL. Available: <https://www.stroud.gov.uk/media/1070683/final-stroud-consultation-report.pdf>

- Facilities that may be surplus to requirement.

Potential sport, health and wellbeing hubs focused around playing pitches are identified in the north and south of the District as well as a number of other priority pitch related projects.

**Stroud District Indoor/Built Sports Facilities Needs Assessment 2018-2040 (2019)<sup>90</sup>:** The Stroud District Indoor/Built Sports Facilities Needs Assessment is one of a set of reports prepared for the local authority that considers the provision of built (principally indoor) sports and active recreation facilities for the District.

The Needs Assessment provides an overview of the demographics within the Stroud District relating to sport and recreation. Inequalities that exist in sporting participation levels between areas of greater deprivation and affluence were identified as a significant barrier to an active lifestyle. The character of the local authority’s population continues to change, and will affect the types of sport, play and leisure activity appealing to local people.

Six facilities are assessed in the report, of which four are financially supported by the District Council. Further detail is provided within the Assessment of Current Infrastructure of this chapter.

The Needs Assessment found that whilst existing sports halls, swimming pool and other indoor/built sporting facilities achieved a majority of local demands and were in a good condition, an increase in population will place future demand on facilities and some areas within the District still suffered from access issues to facilities.

**Stroud District Playing Pitch Strategy (2019)<sup>91</sup>:** The Playing Pitch Strategy (PPS) accompanies the Stroud District Indoor/Built Sports Facilities Needs Assessment and provides an overview of sport specific priorities, potential

<sup>90</sup> Leisure and the Environment (2019) Stroud District Indoor/Built Sports Facility Needs Assessment Final Report. Available: <https://www.stroud.gov.uk/media/1070626/stroud-built-facility-needs-assessment-final.pdf>

<sup>91</sup> Ethos (201) Stroud District Playing Pitch Strategy Available: [https://www.stroud.gov.uk/media/1070634/stroud-playing-pitch-strategy-final-strategy\\_main-report-part-1.pdf](https://www.stroud.gov.uk/media/1070634/stroud-playing-pitch-strategy-final-strategy_main-report-part-1.pdf)

priority sites and projects to contribute towards the delivery of the PPS Strategy and Action Plans.

The PPS considers the current and future demand of facilities across different sports across the district. The level of demand for each individual sport is a key indicator to determine future sporting infrastructure needs.

Nine ‘Priority Projects/Sites’ and eight ‘Other Priority Projects/Sites’ are identified within the PPS which are to be protected and developed as sport, health and wellbeing hubs. These sites are identified in the Assessment of Current Infrastructure section of this chapter.

**Stroud District Local Plan Review Pre-submission Draft Plan (2021)<sup>92</sup>:** The Pre-submission Draft Local Plan identifies improving the provision of good quality sports facilities, to meet the District’s needs and increase participation in sports and physical activity as an action for the Plan.

The Local Plan states that future housing and population growth will increase localised demand for many forms of sports facilities, and it will be important to review the level of provision especially in areas of rapid population change. The following review of existing sporting facilities is provided:

- There is scope for further health and fitness facilities at leisure centres and for further indoor waterspace opportunities. Existing Council owned pools are in good condition and well used.
- Whilst the quantity of sports halls is good and there is a strong record of community use and management of school facilities, some of the older school sports halls need upgrade and repair and some sports would benefit from bespoke facilities.
- There is a lack of “track and field” training facilities for athletes and indoor tennis facilities, although there is provision in Gloucester.

- There is generally a good spread of community halls across the District. In some locations their upgrading will help to meet community needs where access to more centrally planned leisure centres is difficult.

Delivery Policy DHC6 ‘Protection of existing open spaces and built and indoor sports facilities’ adapts existing Environment policy ES13 ‘Protection of existing open spaces’ in the current Local Plan. The proposed changes seek to strengthen the existing policy, by broadening it to include built and indoor sports facilities. The policy will address recommendations arising from the Stroud District Open Space and Green Infrastructure Study.

Delivery Policy DH7 ‘Provision of new open space and built and indoor sports facilities’ replaces existing Environment policies ES14 ‘Provision of semi-natural and natural green space within new residential development’ and ES15 ‘Provision of outdoor play space’ in the current Local Plan and addresses recommendations arising from the Stroud District Open Space and Green Infrastructure Study. The policy outlines that new residential development shall be accompanied with additional accessible recreational and natural green space, and indoor sport facilities, in accordance with quantity and access standards provided.

Delivery Policy EI11 ‘Providing sport, leisure, recreation and cultural facilities’ outlines that planning applications for new sports, cultural, leisure and recreational facilities, or improvements and extensions to existing facilities, will be permitted provided they meet criteria outlined in the Policy.

## Scheme and Project Delivery

### Sports and Recreation schemes since 2014

- **Hunts Grove Sports Pitches and Community Centre:** The s.106 agreement for the outline application states that no more than 500 dwellings can be occupied prior to the implementation of sports facilities onsite. The

<sup>92</sup> Stroud District Council (2019) Pre-submission Draft Plan. Available: <https://www.stroud.gov.uk/environment/planning-and-building-control/planning-strategy/stroud-district-local-plan-review>

updated phasing plan submitted as part of application S.20/0788/DISCON states that *“the Sports Pitches and Community Centre including, the associated Landscaping to the surrounding POS, is due to commence 2022 and completion is anticipated in 2023.”*

- **North East Cam Sports Pitches:** Outline permission was granted in 2017 including improvements to Jubilee Playing Fields and onsite areas of play.
- **West of Stonehouse Sports Pitches:** New sports pitches approved as part of outline planning application.
- **Painswick Recreation Ground Levelling and Pitch Creation:** An award of £50,000 was given to the Recreation Ground Painswick Trust in June 2013 for the levelling and creation of new pitches at Painswick Recreation Ground. No planning application has yet been submitted in consideration of the funding received.
- **Stonehouse Skatepark:** An award of £50,000 was given to Stonehouse Town Council for the development of a skatepark in August 2013. The skatepark was opened in 2014 and is managed by ‘Maverik Skateparks’. The skate park has been constructed within the site boundary of the youth centre planning application (S.12/1101/FUL).
- **Jubilee Playing Fields Project:** Four awards coming to a total of £92,233 were awarded to Cam Parish Council and Randwick Village Hall and Playing Fields (Sports Development Group). The funding was received between April 2014 and October 2015. The funding was to deliver changing rooms and additional sports facilities. The Jubilee Fields are a 16-acre site, and sports pitches and a pavilion were constructed in 2017.
- **Minchinhampton Rugby Football Club Changing Facilities:** An award of £50,000 was granted to Minchinhampton Rugby Football Club in August 2015 for the construction of changing rooms and showers. The funding was to also provide welfare support to the club. The new clubhouse with changing rooms and shower facilities was opened in 2017.
- **Dursley Rugby Football Club Changing Facilities:** An award of £75,000 was granted to Dursley Rugby Football Club in February 2016 for the development of new changing facilities. The planning application

S.13/2543/FUL for the erection of changing rooms was granted approval in March 2014.

- **Frocester Cricket Club Clubhouse:** An award of £75,000 was granted to Frocester Cricket Club for the development of a cricket club in November 2015. S.14/1613/FUL was granted for approval in 2014 for the erection of a new cricket pavilion and has now been constructed.
- **Wotton-under-Edge Changing Rooms:** An award of £45,000 was granted to Wotton-under-Edge Town Council for the refurbishment and development of changing rooms in January 2018.
- **Petanque/Boules area installation:** An award of £3,490 was granted to Dursley Town Council for the installation of a petanque and boules area in June 2019.

## Assessment of Current Infrastructure Provision

### Indoor Sport Facilities

#### Leisure Centres

There are currently seven facilities operating in the District which have the character of community leisure centres. Four of these received financial support from the District Council. The facilities are listed by Parish Cluster within Table 39 below.

Table 39 Leisure Centre Provision<sup>93</sup>

| Cluster        | Leisure Centre                                 | Description  |
|----------------|--|--|
| Stroud Valleys | Stratford Park Leisure Centre, Stroud          | The facilities include a 25m x 4-lane pool, squash courts, activity studios, equipped fitness suites, wet/dry changing, café, physio rooms, dedicated reception, lifts, and 50m Lido pool for the summer month). The venue is set within the attractive and multifunctional Stratford Park. This venue is operated by ‘Everyone Active’ on behalf of the District Council. |
|                | Thomas Keble School, Eastcombe                 | Facilities include a 4-court sports hall, equipped fitness suite, dance/activity room, changing, and small reception kiosk). This venue was, up until September 2018, managed outside school hours by the District Council. School Letting Solutions has now been engaged by the school to manage community use outside of school hours.                                   |
|                | Archway School, Stroud                         | Facilities include a 4-court sports hall, equipped fitness suite, activity/teaching room, 20m x 4-lane swimming pool, wet/dry changing, reception kiosk). This venue is managed both inside outside school hours by the school.  |
| Cam & Dursley  | The Pulse, Dursley                             | The facilities include a 25m x 3-lane pool, equipped fitness space, and large dance/activity space, wet/dry changing, dedicated reception with refreshment area, viewing area for pool, and lift). This venue is managed directly by the District Council.   |
|                | Rednock Sports Centre, Rednock School, Dursley | Facilities include a 4-court sports hall, equipped fitness suite, 2 squash courts, changing, reception kiosk, attached community/social  |

| Cluster            | Leisure Centre  | Description  |
|--------------------|---|--|
|                    |   | venue). This venue is managed both inside outside school hours by the school.  |
| Stonehouse Cluster | Maidenhill Sports Centre, Maidenhill School, Stonehouse | The facilities include a 4-court sports hall, gym, dance/activity room, changing, and dedicated reception). This venue was, up until September 2018, managed outside school hours by the District Council. The Stonehouse Sports Centre Ltd now works in partnership with the Governors of Maidenhill School to ensure that the facility remains open to the public outside of school hours. |
| Wotton Cluster     | Wotton Sports Centre, Katherine Lady Berkeley School    | Facilities include a including 4-court sports hall squash court, equipped fitness suite, activity/dance studio, changing, and dedicated reception). This venue is managed outside school hours by ‘Sport Wotton’ - a charitable trust.   |

The facilities at the Archway School, Wotton Sports Centre, Rednock Sports Centre, Thomas Keble Sports Centre, and Maidenhill Sports are not managed by the District Council but have some form of community use.

Other larger state-funded and independent schools in the local authority have significant built sports facilities (see below). Whilst these can sometimes be available for outside use by clubs and organisations, their primary function is to meet the needs of the school. The noteworthy schools in this respect are:

- Wycliffe College and Preparatory School, Stonehouse (Independent school): Facilities include 1 x 8-court sports hall, 1 x 3-court sports hall, dance/activity space/equipped fitness suite. The facilities are used by a variety of community sports clubs, when not required by the school (including football, hockey, rugby, cricket, netball, and basketball).

<sup>93</sup> Section 3 of Stroud District Indoor/Built Sports Facility Needs Assessment (2019) Available: <https://www.stroud.gov.uk/media/1070626/stroud-built-facility-needs-assessment-final.pdf>



- Marling School, Stroud (state-supported school): Facilities include 4-court sports hall and equipped fitness suite. Facilities are let regularly to local judo, netball, basketball, and football clubs. The sports hall is let out to external clubs and organisations every weekday evening and Saturday mornings, so the only availability is Saturday afternoons and Sundays.

The above schools therefore allow varying amounts of community access to their facilities, subject to the priority demands of the school.

Stroud High School for Girls has a 4-court sports hall, but is largely for school use, albeit there is evidence of a small amount of club use.

### Swimming Pools

The main community pools within the District are those at Stratford Park Leisure Centre (Stroud), and The Pulse (Dursley). These accommodate the major part of resident demand within the District and are managed by Everyone Active, on behalf of the Council.

There are other indoor pools that are used for club and group activity including at The Archway School (Stroud); and, at Wycliffe College- use by community clubs at these two venues is limited by the primary function of the pools to meet school needs.

Important local seasonal venues are located in Wotton (Wotton Pool is a small Lido Pool with retractable cover); and, the 50-metre Lido at Stratford Park, the latter also being used by clubs for training in the warmer months.

Other outdoor pools, such as the Berkeley Primary School, offer some community season during warmer months, and the summer holiday period.

Table 40 Swimming Pool Provision<sup>94</sup>

| Cluster        | Leisure Centre | Description  |
|----------------|----------------|--|
| Stroud Valleys | Archway School | The pool was built in 1953 is used by sports clubs and community associations. The pool has an area of 180 |

| Cluster          | Leisure Centre                                       | Description   |
|------------------|--|---|
|                  |  | square metres and is 20 metres in length. The pool is managed by a Local Authority (in house).  |
|                  | Beaudesert Park School (Indoor and Lido Pool)        | The pools are used by sports clubs and community associations. The indoor pool has an area of 180 square metres and is 18 metres in length. The lido pool has an area of 94 square metres and is 13 metres in length. The pool is managed by the School.  |
|                  | Stratford Park Leisure Centre (Indoor and Lido Pool) | The indoor pool was built in 1975 and the lido pool in 1965. The pools are used on a 'pay and play' basis and are managed by Everyone Active. The indoor pool has an area of 250 square metres and is 25 metres in length. The lido pool has an area of 850 square metres and is 50 metres in length. |
| Berkeley Cluster | Berkeley Primary School (Lido)                       | The pool was built in 1910 and is privately used. The lido pool has an area of 90 square metres and is 18 metres in length. The pool is managed by the School.  |
| Cotswold Cluster | The Croft Primary School (Lido)                      | The pool is for private use. The pool has an area of 70 square metres and is 10 metres in length. The lido pool will be managed by the school.  |
| Cam & Dursley    | The Pulse  | The pool was built in 2016 and is used on a 'pay and play' basis. The pool has an area of 212 square metres and is 25 metres in length. The pool is managed by Everyone Active.   |
| Wotton Cluster   | Wotton Pool (Covered Lido)                           | The pool was built in 1935 and is used on a 'pay and play' basis. The pool has an area of 111 square metres and is 18 metres in length. The pool is managed by a Trust and is owned by the District Council.  |
| Stonehouse       | Wycliffe College Preparatory School                  | The pool is used by sports clubs and community associations. The pool has an area of 155 square metres and is 20 metres in length. The pool is managed by the School.   |

<sup>94</sup> Section 4 of Stroud District Indoor/Built Sports Facility Needs Assessment (2019) Available: <https://www.stroud.gov.uk/media/1070626/stroud-built-facility-needs-assessment-final.pdf>



## Sports Halls

Several sports halls are located within the Stroud District. Some of these are largely or wholly un-available for use by the general community. Halls vary in size and utility for use by the community.

This sub-section does not cover village and community halls, which also make a valuable contribution to providing recreation opportunities especially in rural areas.

Table 41 comprises a range of provision covering local authority, education, and voluntary facilities. Only a portion of these sites are available for the general community to use.

Table 41 Sport Hall Provision<sup>95</sup>

| Cluster        | Name                   | Facility Sub Type           | Access Type                       | Management Type                        |
|----------------|------------------------|-----------------------------|-----------------------------------|--|
| Stroud Valleys | Archway School         | Activity Hall <sup>96</sup> | Sports Club/Community Association | Local Authority (in house)             |
|                | Archway School         | Main <sup>97</sup>          | Sports Club/Community Association | Local Authority (in house)             |
|                | Beaudesert Park School | Activity Hall               | Private Use                       | School/College (in house)              |
|                | Stroud High School     | Activity Hall               | Private Use                       | School/ College/ University (in house) |
|                | The Acorn School       | Activity Hall               | Private Use                       | School/ College/ University (in house) |

<sup>95</sup> Section 5 of Stroud District Indoor/Built Sports Facility Needs Assessment (2019) Available: <https://www.stroud.gov.uk/media/1070626/stroud-built-facility-needs-assessment-final.pdf>

<sup>96</sup> NB: this is a multi-sports hall (below 3 badminton courts) where activities take place that does not qualify as a main hall and is not a purpose-built studio. It can include Community/Village

| Cluster | Name                          | Facility Sub Type | Access Type                       | Management Type                        |
|---------|-------------------------------|-------------------|-----------------------------------|--|
|         | Thomas Keble Sports Centre    | Main              | Pay and Play                      | Commercial (School Letting Solutions)  |
|         | Woodchester Village Hall      | Activity Hall     | Sports Club/Community Association | Community Organisation                 |
|         | Marling School                | Main              | Sports Club/Community Association | School/College (in house)              |
|         | Nailsworth Recreation Centre  | Activity Hall     | Sports Club/Community Association | School/College (in house)              |
|         | Nailsworth Recreation Centre  | Activity Hall     | Sports Club/Community Association | School/College (in house)              |
|         | Nailsworth Subscription Rooms | Activity Hall     | Sports Club/Community Association | School/College (in house)              |
|         | Randwick Village Hall         | Activity Hall     | Sports Club/Community Association | Local Authority                        |
|         | Stratford Park Leisure Centre | Main              | Sports Club/Community Association | Commercial Management                  |
|         | Stratford Park Leisure Centre | Activity Hall     | Sports Club/Community Association | Commercial Management                  |
|         | Stroud High School            | Main              | Private Use                       | School/ College/ University (in house) |

halls.

<sup>97</sup> NB: main multi-sports hall(s) have a minimum size of 3 Badminton courts and above.

| Cluster            | Name                                | Facility Sub Type   | Access Type                        | Management Type                        |
|--------------------|-------------------------------------|---------------------|------------------------------------|--|
|                    | St Roses School                     | Activity Hall       | Private Use                        | School/ College/ University (in house) |
| Berkeley Cluster   | Ham Fields Leisure Centre           | Activity Hall       | Registered Membership Use          | Trust                                  |
|                    | Focus School                        | Activity Hall       | Private Use                        | School/College (in house)              |
| Cotswold Cluster   | Sheepscombe Village                 | Activity Hall       | Sports Club/ Community Association | Community Organisation                 |
| Cam & Dursley      | Rednock School                      | No detail available | No detail available                | School/ College (in house)             |
|                    | Stinchcombe Village Hall            | Activity Hall       | Sports Club/ Community Association | Community Organisation                 |
| Severn Vale        | Frampton-on-Severn Community Centre | Activity Hall       | Local Authority                    | Community Organisation                 |
| Stonehouse Cluster | Maidenhill School                   | Main                | Private Use                        | School/College (in house)              |
|                    | Maidenhill Sports and Dance Centre  | Main                | Pay and Play                       | TBC (Stonehouse Sports Centre Ltd)     |
| Wotton Cluster     | B&F Fitness                         | Activity Hall       | Pay and Play                       | Commercial Management                  |
|                    | Wotton Sports Centre                | Activity Hall       | Pay and Play                       | Commercial Management                  |
|                    | Wotton Sports Centre                | Main                | Pay and Play                       | Commercial Management                  |

Beyond indoor swimming pools and sports halls (perhaps combined into larger leisure centres) there are other forms of more specialist ‘built’ sports facilities, and these include indoor tennis courts, indoor bowls greens, athletics tracks, and Artificial Grass Pitches (AGPs)<sup>98</sup>.

The principal locations in the District for such activities are:

- Indoor Bowls (Stroud). A modern six-rink venue owned and managed by Stroud District Bowling Club (which also has an outdoor green).
- Indoor Skatepark (Brimscombe). The Rush Skatepark also caters for BMX and is housed in former industrial warehousing.
- Squash courts at Rednock School (Dursley); Stratford Park Leisure Centre (Stroud); Stroud Rugby Club; Wotton Sports Centre; and Wycliffe College (Stonehouse).

There are no dedicated indoor tennis venues and no synthetic athletics tracks within the District. The closest facilities of this type are in Gloucester, which also hosts indoor bowling facilities. There are also indoor tennis and indoor bowling facilities in nearby Brockworth (Tewkesbury).

### Playing Pitches & Other Outdoor Sports

The Stroud District Playing Pitch Strategy (2019)<sup>99</sup> outlines the context for playing pitches in the District on the basis of the following sport provision:

- Football
- Cricket
- Rugby
- Hockey
- Tennis and Bowls
- Athletics

<sup>98</sup> Section 1 of the Stroud District Playing Pitch Strategy: Final Strategy (2019) Available: [https://www.stroud.gov.uk/media/1070634/stroud-playing-pitch-strategy-final-strategy\\_main-report-part-1.pdf](https://www.stroud.gov.uk/media/1070634/stroud-playing-pitch-strategy-final-strategy_main-report-part-1.pdf)

<sup>99</sup> As above.

A summary of existing football pitches with community use listed by cluster is provided in Table 42.

A total of 61 adult football pitches were recorded, with 40 rated as standard and 21 rated as good. None were rated poor. The Cotswold Cluster had by far the lowest level of provision, whilst the Stroud Valleys Cluster had the best coverage.

Table 42 Football Pitch Provision<sup>100</sup>

| Cluster                | Sites | Adult Football | Junior 11 v 11 | Junior 9 v 9 | Mini 7 v 7 | Mini 5 v 5 | Total |
|------------------------|-------|----------------|----------------|--------------|------------|------------|-------|
| Berkeley Cluster       | 5     | 5              | 0              | 1            | 3          | 0          | 14    |
| Cam & Dursley          | 6     | 7              | 0              | 3            | 2          | 1          | 19    |
| Cotswold Fringe        | 2     | 2              | 0              | 0            | 0          | 0          | 4     |
| Gloucester Fringe      | 4     | 3              | 0              | 2            | 3          | 0          | 12    |
| Severn Vale            | 3     | 3              | 0              | 2            | 1          | 3          | 12    |
| Stonehouse Cluster     | 8     | 10             | 0              | 2            | 6          | 3          | 29    |
| Stroud Valleys Cluster | 28    | 25             | 1              | 4            | 8          | 3          | 69    |
| Wotton Cluster         | 5     | 6              | 0              | 2            | 0          | 1          | 14    |
| Total                  | 61    | 61             | 1              | 1            | 16         | 23         | -     |

<sup>100</sup> Stage C Section 3 Football Stroud District Playing Pitch Strategy (2019) Available: [https://www.stroud.gov.uk/media/1070690/pps\\_s3-football\\_stage-c-final-needs-assessment-report\\_may-2019.pdf](https://www.stroud.gov.uk/media/1070690/pps_s3-football_stage-c-final-needs-assessment-report_may-2019.pdf)

A summary of all other playing pitches and outdoor sports provision in the Stroud District is provided in Table 43.

Whilst all are assessed as being good within the PPS, there is generally a lack of 3G artificial pitches in the district and three clubs in the Gloucester Fringe are reliant on facilities within Gloucester City.

All cricket grounds scored highly, and out of 41 grounds assessed, 31 were rated good and 10 as standard. There was also a good geographical diversity of pitches, with each cluster having at least three pitches and a number of grounds having good quality cages.

No rugby playing surfaces were regarded as being less than acceptable.

Around a half of tennis courts were accessible to the community, typically bookable through town or parish councils, with around 15% of courts having free access.

There are 10 bowling greens in Stroud, which are generally in good condition, however many are in low demand.

Table 43 Playing Pitches and Outdoor Sport Provision<sup>101</sup>

| Cluster           | 3G FTP | Cricket Sites | Bowls | Rugby | Sand Based AGP | Tennis | Total |
|-------------------|--------|---------------|-------|-------|----------------|--------|-------|
| Berkeley Cluster  | 0      | 5             | 0     | 0     | 0              | 2      | 2     |
| Cam and Dursley   | 1      | 5             | 2     | 2     | 0              | 4      | 9     |
| Cotswold Fringe   | 0      | 7             | 2     | 0     | 0              | 3      | 5     |
| Gloucester Fringe | 0      | 3             | 0     | 0     | 0              | 1      | 1     |
| Severn Vale       | 0      | 3             | 1     | 0     | 0              | 1      | 2     |

<sup>101</sup> Stroud Playing Pitch Strategy Appendices <https://www.stroud.gov.uk/environment/planning-and-building-control/planning-strategy/evidence-base/environmental-evidence/green-infrastructure-sport-and-recreation-study/stroud-playing-pitch-strategy>

|                    |   |    |    |    |   |    |    |
|--------------------|---|----|----|----|---|----|----|
| Stonehouse Cluster | 0 | 8  | 0  | 2  | 1 | 2  | 5  |
| Stroud Valleys     | 1 | 9  | 4  | 5  | 1 | 5  | 16 |
| Wotton Cluster     | 0 | 3  | 1  | 1  | 1 | 2  | 5  |
| Total              | 2 | 43 | 10 | 10 | 3 | 20 | -  |

## Planned Provision and Scheme Identification based on revised Housing and Employment Needs

### District-wide summary of requirements

Sport England’s Active Places Power, Sports Facility Calculator<sup>102</sup> has been used to calculate future demand for artificial grass pitches, sports halls and swimming pools. A summary of demand for these sports facilities is included within Table 44 overleaf. Further commentary is also provided by Parish Cluster.

As set out in Table 8.1 of the Built Facility Needs Assessment, no standards have been produced for other types of sports and recreation infrastructure, however commentary is provided on future demand for bowls, tennis, athletics and other activities. This commentary is set out by Parish Cluster.

### The Stroud Valleys

The Pre-submission Draft Local Plan identified 640 houses to be delivered through Local Development Sites at Stroud, Brimscombe and Thrupp, Minchinhampton and Nailsworth.

### Indoor Sport Facilities, Leisure Centres and Sports Halls

Stratford Park Leisure Centre is the main sports facilities site in Stroud, catering for a variety of indoor and outdoor activities. The Playing Pitch Strategy outlines that there is a desire to encourage greater usage and effect improvements to create a hub for sport. The Built Facility Needs Assessment also outlines that investment should be focussed at Stratford Park, including demand for court space, fitness stations and exercise studios.

No investment is required in indoor tennis or indoor bowls.

<sup>102</sup> <https://www.activeplacespower.com/reports/sports-facility-calculator>

## Swimming Pools

The Built Facility Needs Assessment, Table 8.2, recommends that investment should be focussed on improving the existing provision in the Cluster, which is generally good, with the Stratford Park Leisure Centre, Stratford Park Lido and the Archway School.

## Playing Pitches & Other Outdoor Sports

The Sports Facility Calculator identifies relatively low total demand for new artificial sports pitches resulting from the growth set out in the Draft Local Plan. The total **cost of likely improvements to artificial grass pitches to respond to future demand would be approximately £32,800.**

The Playing Pitch Strategy states that there is an urgent requirement to provide a new 3G football pitch to address existing deficits. Potential sites include Archway School or Marling School. There is also no central base for Stroud Rugby Club.

The Playing Pitch Strategy identifies Thomas Keble School as a potential hub for sport, health and wellbeing as it has a history of community use and it has the potential to develop community use of adjacent football and rugby pitches.

Other priority projects include:

- Improvements to pitch maintenance at Stratford Park Leisure Centre artificial grass pitch, Stroud
- Provision of clubhouse for Stroud Hockey Club at Stratford Park Leisure Centre
- Improvements to Stratford Court Playing Fields

Table 44 Summary of Sports and Recreation Demand and Costs (Sports Facility Calculator, May 2020)

| Ref                     | Site Allocation                              | Ward Cluster             | Housing Delivery to 2040 | Population | Artificial Grass Pitches |          | Sports Halls   |            | Swimming Pools |            | Total Cost (£) |
|-------------------------|--|--------------------------|--------------------------|------------|--------------------------|----------|----------------|------------|----------------|------------|----------------|
|                         |  |                          |                          |            | Demand (Pitches)         | Cost (£) | Demand (Halls) | Cost (£)   | Demand (Pools) | Cost (£)   |                |
| PS24                    | Cam North West (West of Draycott)            | Cam & Dursley            | 900                      | 2115       | 0.05                     | £56,101  | 0.14           | £366,270   | 0.1            | £392,068   | £814,439       |
| PS25                    | Cam North East Extension (East of River Cam) | Cam & Dursley            | 180                      | 423        | 0.01                     | £11,264  | 0.03           | £73,447    | 0.02           | £78,325    | £163,036       |
| PS28                    | Dursley                                      | Cam & Dursley            | 10                       | 24         | 0                        | £639     | 0              | £4,167     | 0              | £4,444     | £9,250         |
| PS19a                   | Stonehouse North West                        | Stonehouse Cluster       | 700                      | 1645       | 0.04                     | £43,634  | 0.11           | £284,877   | 0.08           | £304,942   | £633,453       |
| PS16 & PS42             | Leonard Stanley                              | Stonehouse Cluster       | 40                       | 94         | 0                        | £2,503   | 0.01           | £16,322    | 0              | £17,406    | £36,231        |
| PS17                    | Stonehouse                                   | Stonehouse Cluster       | 10                       | 24         | 0                        | £639     | 0              | £4,167     | 0              | £4,444     | £9,250         |
| PS01 & PS02             | Brimscombe & Thrupp                          | Stroud Valleys           | 190                      | 447        | 0.01                     | £11,903  | 0.03           | £77,614    | 0.02           | £82,769    | £172,286       |
| PS05                    | Minchinhampton                               | Stroud Valleys           | 80                       | 188        | 0                        | £5,006   | 0.01           | £32,643    | 0.01           | £34,811    | £72,460        |
| PS06 & PS07             | Nailsworth                                   | Stroud Valleys           | 90                       | 212        | 0.01                     | £5,623   | 0.01           | £36,714    | 0.01           | £39,300    | £81,637        |
| PS10, PS11, PS12 & PS13 | Stroud                                       | Stroud Valleys           | 165                      | 388        | 0.01                     | £10,292  | 0.03           | £67,193    | 0.02           | £71,926    | £149,411       |
| PS34                    | Sharpness Docks                              | Berkeley Cluster         | 300                      | 705        | 0.02                     | £18,774  | 0.05           | £122,412   | 0.03           | £130,542   | £271,728       |
| PS36                    | Sharpness (Garden Village)                   | Berkeley Cluster         | 2400                     | 5640       | 0.15                     | £150,189 | 0.38           | £979,297   | 0.27           | £1,044,336 | £2,173,822     |
| PS37                    | Wisloe (Garden Village)                      | Berkeley Cluster         | 1500                     | 3525       | 0.09                     | £93,868  | 0.24           | £612,061   | 0.17           | £652,710   | £1,358,639     |
| PS33                    | Berkeley                                     | Berkeley Cluster         | 170                      | 400        | 0.01                     | £10,610  | 0.03           | £69,271    | 0.02           | £74,150    | £154,031       |
| PS35                    | Newtown & Sharpness                          | Berkeley Cluster         | 70                       | 165        | 0                        | £4,394   | 0.01           | £28,650    | 0.01           | £30,552    | £63,596        |
| PS41                    | Painswick                                    | Cotswold Cluster         | 20                       | 47         | 0                        | £1,252   | 0              | £8,161     | 0              | £8,703     | £18,116        |
| G1                      | South of Hardwicke                           | Gloucester Fringe        | 1350                     | 3173       | 0.08                     | £84,164  | 0.21           | £549,492   | 0.15           | £588,195   | £1,221,851     |
| PS30                    | Hunts Grove Extension                        | Gloucester Fringe        | 750                      | 1763       | 0.05                     | £46,947  | 0.12           | £306,117   | 0.08           | £326,447   | £679,511       |
| HAR017                  | Hardwicke                                    | Gloucester Fringe        | 10                       | 24         | 0                        | £579     | 0              | £4,156     | 0              | £4,449     | £9,184         |
| <b>G2</b>               | <b>Land at Whaddon</b>                       | <b>Gloucester Fringe</b> | 3000                     | 7050       | 0.18                     | £187,002 | 0.47           | £1,220,901 | 0.33           | £1,306,895 | £2,714,798     |
| PS44                    | Frampton-on-Severn                           | The Severn Vale          | 30                       | 71         | 0                        | £1,891   | 0              | £12,328    | 0              | £13,147    | £27,366        |

| Ref          | Site Allocation | Ward Cluster       | Housing Delivery to 2040 | Population   | Artificial Grass Pitches |                 | Sports Halls   |                   | Swimming Pools |                   | Total              |
|--------------|-----------------|--------------------|--------------------------|--------------|--------------------------|-----------------|----------------|-------------------|----------------|-------------------|--------------------|
|              |                 |                    |                          |              | Demand (Pitches)         | Cost (£)        | Demand (Halls) | Cost (£)          | Demand (Pools) | Cost (£)          | Cost (£)           |
| PS45 & PS46  | Whitminster     | The Severn Vale    | 50                       | 118          | 0                        | £3,130          | 0              | £20,435           | 0.01           | £21,874           | £45,439            |
| PS38         | Kingswood       | The Wotton Cluster | 50                       | 118          | 0                        | £3,142          | 0.01           | £20,489           | 0.01           | £21,850           | £45,481            |
| <b>TOTAL</b> |                 |                    | <b>12065</b>             | <b>28353</b> | <b>0.71</b>              | <b>£753,546</b> | <b>1.89</b>    | <b>£4,917,184</b> | <b>1.34</b>    | <b>£5,254,285</b> | <b>£10,925,015</b> |

\*The red text denotes those sites that are not currently proposed to meet the housing needs of Stroud District Council.



## The Stonehouse Cluster

The Pre-submission Draft Local Plan identifies 750 houses to be delivered through Strategic and Local Development Sites at Stonehouse, Stonehouse North West and Leonard Stanley.

### Indoor Sport Facilities, Leisure Centres and Sports Halls

The Stonehouse Cluster currently benefits from the Maidenhill Sports Centre which includes a 4-court sports hall, gym, dance and activity room and changing facilities.

The Sports Facility Calculator identifies demand for sports halls resulting from the growth set out in the Draft Local Plan. **The total cost of sport hall investment to respond to future demand would be approximately £305,000.**

The Built Facility Needs Assessment, Table 8.2, outlines that additional sport hall court space and additional space for health and fitness suites are required. Investment should be focused on the existing Maidenhill Sports and Dance Centre, subject to appropriate community use arrangements.

Additional small community hall units are identified as required within Table 8.2, but investment should focus on the improvement of existing facilities. Stonehouse Council would like to improve community facilities at Oldends Lane, and this should be explored further with the District Council.

No investment is required for indoor bowls or indoor tennis.

### Swimming Pools

The Sports Facility Calculator identifies demand for swimming pools resulting from the growth set out in the Draft Local Plan. **The total cost of swimming pool investment to respond to future demand would be approximately £327,000.**

The Built Facility Needs Assessment, Table 8.2, states that there is currently no dedicated indoor community pool in the Stonehouse Cluster. Investment would be best focused on improving existing pool facilities in the Stroud Valley Cluster.

Apart from the Stratton Park facility, the swimming pool at Archway School offers scope for upgrade subject to better community use arrangements.

### Playing Pitches & Other Outdoor Sports

The Sports Facility Calculator identifies demand for new artificial sports pitches resulting from the growth set out in the Draft Local Plan. **The total cost of likely improvements to artificial grass pitches to respond to future demand is estimated at approximately £46,776, with £43 being identified at the Stonehouse North West development.**

The Playing Pitch Strategy identifies Leonard Stanley as a focus project for youth football development and as a football hub site. The Strategy also identifies that Maidenhill School is a potential site for a 3G Football Turf Pitch (FTP).

Oldends Lane Playing Field is identified within the Playing Pitch Strategy Appendix as an important site within Stonehouse and a possible site for a 3G FTP.

Wycliffe College is identified as an important site for hockey training. This includes community use of a sand base Artificial Grass Pitch at the College is identified and is to be secured under a community use agreement.

## Cam & Dursley

The Pre-submission Draft Local Plan identified 1090 houses to be delivered through Strategic and Local Development Sites at Cam North West, Cam North East Extension, Cam and Dursley.

### Indoor Sport Facilities, Leisure Centres and Sports Halls

The Sports Facility Calculator identifies **approximately £443,884 of sport hall improvement costs** in relation to the Draft Local Plan site allocations.

The Built Facility Needs Assessment, Table 8.2, states that future investment for sports halls, health and fitness suites and studios should be focused on The Pulse and Rednock School, with the latter subject to appropriate community use arrangements.

No investment is required for indoor bowls or indoor tennis.

### Swimming Pools

The Sports Facility Calculator identifies demand for swimming pools resulting from the growth set out in the Draft Local Plan. **The total cost of swimming pools investment to respond to future demand would be approximately £475,000.**

The Pulse Leisure Facility is one of the largest indoor sport facilities in the District and includes 25m x 3-lane pool and changing facilities. This venue is managed directly by the District Council. The Built Facility Needs Assessment, Table 8.2, states that investment should be focused on the existing Pulse venue, potentially contributing to widening the pool to providing a 4-lane facility.

### Playing Pitches & Other Outdoor Sports

The Sports Facility Calculator identifies demand for artificial sports pitches resulting from growth set in the Draft Local Plan. **The total cost of likely improvements to artificial grass pitches to respond to future demand would be approximately £68,000.**

The Playing Pitch Strategy identifies the Everlands facility as a valuable but restricted site for football, cricket and tennis. The facility has been identified as urgently requiring changing facilities.

The playing fields in Dursley are currently underused and the Playing Pitch Strategy identifies that the future of the site requires clarification and action.

Key Sites identified within the Playing Pitch Strategy Appendix includes:

- Dursley Rugby Club – Potential Sport Health and Wellbeing (SHW) hub. This would be in a partnership between Dursley Running Club, Dursley RFC and Stinchcombe Stragglers CC (also involves adjacent farmland).
- Jubilee Playing Fields – Possible site for a half size FTP.

- Rednock School - Priority to make best use of this facility and work towards FA Registration and affordable match play slots.
- War Memorial Recreation Ground, Dursley – Potential football pitch improvements and SHW hub. Key site for women and girls’ football and improvements to playing pitch quality & tennis courts proposed. Upgrading of changing facilities also recommended.
- Cam Cricket Club – Access to an additional cricket pitch for Cam Cricket Club and provision of a new clubhouse to meet requirements for football and cricket.

### The Gloucester Fringe

The Pre-submission Draft Local Plan identifies 5,110 houses to be delivered through Strategic Development Sites at South of Hardwicke, Hunts Grove Extension and Land at Whaddon.

### Indoor Sport Facilities, Leisure Centres and Sports Halls

The Sports Facility Calculator identifies required **investment of approximately £2.08m for sports halls** resulting from growth set out in the Draft Local Plan.

The Built Facility Needs Assessment, Table 8.2, states that there is currently no significant provision in this cluster for sports halls. Investment is identified as being possibly directed towards local village halls and community centres to improve opportunities for indoor sports. Furthermore, investment into local village halls and community centres is recommended to address the shortfall in health and fitness suites and studios. Although some new provision may be required, the improvement of the capacity and quality of existing small community halls should be considered.

No investment is required for indoor bowls or indoor tennis.

### Swimming Pools

The Sports Facility Calculator identifies demand for swimming pools resulting from the growth set out in the Draft Local Plan. **The total cost of swimming**

**pools investment to respond to future demand would be approximately £2.23m.**

The Built Facility Needs Assessment, Table 8.2, sets out that there is currently no dedicated indoor community pool in this area. It states that investment would be best focused on improving existing pool facilities in the Stroud Valley Cluster. If new provision were to be made in the Berkeley Cluster, a contribution might be made to such provision subject to reasonable access by car.

### Playing Pitches & Other Outdoor Sports

The Sports Facility Calculator found there to demand resulting from growth set out in the Draft Local Plan. The **total cost of improvements for artificial grass pitches to respond to future growth set out in the Draft Local Plan would be approximately £319,000.**

The Playing Pitch Strategy states that the tenure at the Rob Dawe Memorial Close should be resolved for Hardwicke Rangers FC. The Playing Pitch Strategy Appendix states that support exists for the Rob Dawe Memorial Close to have permanent changing and clubhouse facilities. Furthermore, the site is identified for protection or replacement if it is to be removed.

The Playing Pitch Strategy Appendix outlines that Hardwicke Village Hall Playing Fields requires enhanced changing facilities for Hardwicke AFC. It states that the preferred option is for a new ground so Hardwicke AFC can meet league requirements.

The Hardwicke Village Hall and Rob Dawe Memorial Close sites are both identified potential SHW hubs.

### The Berkeley Cluster

The 2019 Draft Local Plan identified 4,440 houses to be delivered through Strategic and Local Development Sites at Sharpness Docks, Sharpness (Garden Village) Wisloe (Garden Village), Berkeley and Newtown & Sharpness.

### Indoor Sport Facilities, Leisure Centres and Sports Halls

The Sports Facility Calculator found there to be demand resulting from growth set out in the Draft Local Plan. The **total cost of investment for sports halls to respond to future requirements in the cluster would be approximately £1.81m.**

The Built Facility Needs Assessment, Table 8.2, states that there is limited provision in the area for sports halls, which is on the extremity of catchments for key venues elsewhere. Additional provision will be justified as a result of planned development. There is justification to explore the provision of a new/improved facility in conjunction with the education sector. Although, the existing facility at Ham Fields may warrant upgrading or expansion.

In consideration of health and fitness suites and studios, investment should be undertaken in conjunction with approaches agreed for swimming pools and sports halls in respect of this cluster. Village and community halls identified for future investment are considered as suitable venues for use as health and fitness suites and studios.

For small community halls although some new provision may be required, the improvement of the capacity and quality of existing venues should be explored as part of the solution.

No investment is required for indoor bowls or indoor tennis.

### Swimming Pools

The Built Facility Needs Assessment, Table 8.2, sets out that there is currently no dedicated indoor community pool in this area, and it is on the extremity of catchments for pools elsewhere. Strategic development within this area should explore the provision of a new/improved facility perhaps in conjunction with the education sector.

### Playing Pitches & Other Outdoor Sports

The Sports Facility Calculator identifies demand for artificial sports pitches resulting from growth set out in the Draft Local Plan. The **total cost of likely**

**improvements to artificial grass pitches to respond to demand would be approximately £278,000.**

The Playing Pitch Strategy states that Hamfields Leisure Centre is a possible location for a future 3G FTP. The reinstatement of a cricket pitch is also identified as a potential project within the leisure centre site.

The Playing Pitch Strategy Appendix identifies the following sites for potential future development:

- Rockhampton Cricket Club: Support for an extension to existing development on site and a second pitch for junior play.
- Sharpness Recreation Ground: Support for provision of appropriate changing facility for Sharpness AFC.
- Thornhill Park: Review the site for potential use as a football hub in the future.

## The Severn Vale

The 2019 Pre-submission Draft Local Plan identifies 70 houses to be provided through one Local Development Site through Core Policy CP2.

### Indoor Sport Facilities, Leisure Centres and Sports Halls

The Sports Facility Calculator found there to be demand resulting from growth set out in the Draft Local Plan. **The total cost of investment for sports halls to respond to housing growth in the cluster would be approximately £32,800.**

The Built Facility Needs Assessment, Table 8.2, states that there is currently no significant sport hall provision in the Severn Vale cluster. Investment for sports halls, health and fitness suites and studios is identified as best being invested into local village halls and community centres.

Limited investment funding in consideration of small community halls should be focussed on a discrete priority project to be identified by relevant stakeholders.

No investment is required for indoor bowls or indoor tennis.

The provision of an indoor five vs. five artificial turf pitch facility at the Reg Davies Memorial Ground for Frampton Youth FC is identified within the Playing Pitch Strategy.

### Swimming Pools

The Sports Facility Calculator found there to be demand resulting from growth set out in the Draft Local Plan. **The total cost of investment for swimming pools to respond to future need in the cluster would be approximately £35,000.**

The Built Facility Needs Assessment, Table 8.2, states that there is currently no dedicated indoor community pool in the Severn Vale Cluster. Investment is identified as being best focussed on improving existing pool facilities in the Stroud Valley/Stonehouse areas. If new provision were to be made in the Berkeley Cluster, a contribution to such provision might be made subject to reasonable access by car.

### Playing Pitches & Other Outdoor Sports

The Sports Facility Calculator identifies demand for artificial sports pitches resulting from growth set out in the Draft Local Plan. **The total cost of likely improvements to artificial grass pitches to respond to future demand would be approximately £5,000.**

Whitminster Pavilion is identified within the Playing Pitch Strategy as an important site for youth football and cricket. Upgrading of existing changing facilities is identified as being urgently required.

## The Wotton Cluster

The Pre-submission Draft Local Plan identified 50 houses to be delivered through the Local Development Site at Kingswood.

### Indoor Sport Facilities, Leisure Centres and Sports Halls

The Sports Facility Calculator identifies demand for sports halls resulting from growth set out in the Draft Local Plan. The **total cost of improvements to sports halls to respond to future demand would be approximately £20,000.**

The Built Facility Needs Assessment, Table 8.2, states that investment for sports halls, health & fitness suites and studios should be focussed on Wotton Sports Centre. Innovative improvements to the Wotton Pool may merit consideration as part of improvements, although recognising that these will largely only have seasonal benefit.

No investment is proposed for indoor bowls or indoor tennis.

### Swimming Pools

The Sports Facility Calculator identifies demand for swimming pools resulting from growth set out in the Draft Local Plan as **totalling approximately £22,000.**

The Built Facility Needs Assessment, Table 8.2, states that investment for indoor swimming pools should be focussed largely on the Pulse venue in the Cam & Dursley Cluster.

### Playing Pitches & Other Outdoor Sports

The Sports Facility calculator identifies limited demand for artificial sports pitches resulting from growth set out in the Draft Local Plan at a **cost of approximately £3,000.**

The Wotton Community Sports Parc is identified in the Playing Pitch Strategy as a potential sport, health and wellbeing hub. Pitch improvements are recommended in the Playing Pitch Strategy including additional hockey-compliant artificial grass pitches. New changing and club house facilities are also included in the Strategy. The clubhouse would be for the use by Wotton

under Edge Hockey Club, Wotton Rovers FC, Wotton RFC and other users of the site.

## The Cotswold Cluster

The Pre-submission Draft Local Plan identified 20 houses to be delivered through the Local Development Site at Painswick.

### Indoor Sport Facilities, Leisure Centre and Sports Halls

The Sports Facility calculator identifies required **investment of approximately £8,200 for sports halls** resulting from growth set out in the Draft Local Plan.

The Built Facility Needs Assessment, Table 8.2, states that investment for sports halls, health and fitness suites and studios should be focussed on the Thomas Keble facility, subject to appropriate community use arrangements.

Village and community halls may also be suitable venues for the purposes of studio use, where investment is planned.

No investment is proposed for indoor bowls or indoor tennis.

### Swimming Pools

The Sports Facility calculator identifies required **investment of approximately £8,700 for swimming pools** resulting from growth set out in the Draft Local Plan.

The Built Facility Needs Assessment, Table 8.2, states that there is currently no dedicate indoor community pool in this area. Investment is identified as being best focussed on improving existing pool facilities in Stroud.

### Playing Pitches & Other Outdoor Sports

The Sports Facility Calculator identifies investment of **approximately £1,300 for artificial grass pitches** from growth set out in the Draft Local Plan.

The Playing Pitch Strategy Appendix identifies improvements to changing room facilities at King George V Playing Fields as a key site for improvement. The cricket ground at the Playing Fields is identified as a potential site for reinstatement for use.



## Sector-specific Funding

As outlined in the Playing Pitch Strategy, there is an expectation that some of the potential initiatives identified will be funded wholly or partly by developer contributions via s106 agreements and/or the Community Infrastructure Levy (CIL).

Stroud's CIL Regulation 123 list includes sport in its Social Infrastructure spending<sup>103</sup>. The CIL Stroud Planning Obligations SPD (2017) provides more detail on sport within the Social and Health Infrastructure<sup>104</sup>.

If a Parish has a Neighbourhood Development Plan (NDP), that Town/Parish will receive 25% of the contributions collected from developments within that NDP area. Non-NDP Parishes will receive 15% of contributions. This Parish CIL money can be used by the Parishes for any community infrastructure they consider a priority.

Sport England and National Governing Bodies (NGBs) have capital funds which can make a major contribution to key local capital projects and the identification of projects through the playing pitch strategy process should help increase prospects for the funding of some key projects.

Active Gloucestershire, Sport England, various NGB county and regional offices can advise on specific funding opportunities available specifically for sport pitches locally. The National Lottery has a website allowing potential applicants to search for sources of external funding based on the nature of the project.

## Conclusions

Stroud District has several indoor sports facilities and swimming pools although provision is largely reliant on community access being agreed to schools and colleges. The District benefits from a significant number of outdoor playing

pitches which are largely assessed as being of good quality, however there are shortfalls in the provision of artificial pitches.

The Sport England Sports Facility Calculator has been utilised to assess likely demands for sports halls, swimming pools and artificial grass pitches. The growth set out in the plan would require an additional 0.8 artificial grass pitches, 2.5 sports halls and 1.5 swimming pools.

At strategic development sites, it is expected that sports pitches and playing fields are provided on site. Contributions may be required to improve existing built facilities and there may be a requirement for built provision on the largest strategic development sites. Contributions should be provided in accordance with the costs identified in Table 44. At local development sites, there will likely be a need to improve and/or expand existing facilities to cope with increased demand.

Funding for other projects identified in the Open Space and Green Infrastructure Study, the Playing Pitch Strategy and the Indoor/Built Facilities Needs Assessment will be sought from national and charitable bodies in collaboration with community groups.

<sup>103</sup> CIL Regulation 123 List <https://www.stroud.gov.uk/media/519898/regulation-123-list-copy-november-2017.pdf>

<sup>104</sup> Stroud District Local Plan: Planning Obligations SPD April 2017 <https://www.stroud.gov.uk/media/241797/planning-obligations-spd-final.pdf>

## 10 Infrastructure Assessment: Community Facilities

### Responsibility for delivery

This section covers the provision of Community and Culture infrastructure in Stroud. Delivery of community and culture infrastructure is divided between the following organisations within Stroud.

| Service Provider                                      | Responsibility  |
|---|---|
| <b>Gloucestershire County Council</b>                 | Gloucestershire County Council has a statutory duty under the 1964 Public Libraries Act to provide a public library service.  |
| <b>Stroud District Council</b>                        | The District Council has responsibility for the development and maintenance of a number of community facilities within Stroud.  |
| <b>Town and Parish Councils / Community Groups</b>    | Many community facilities and village halls are owned and managed by local councils and community groups. Whilst often operating with limited budgets, these councils can deliver new infrastructure through bidding and fundraising.   |
| <b>Stroud Village &amp; Community Halls Network</b>   | The Village and Community Halls' Network was launched by Stroud District Council, the Local Strategic Partnership and the Gloucestershire Rural Community Council as an informal support group to develop and share ideas to ensure community spaces are run effectively.   |
| <b>Gloucestershire Rural Community Council (GRCC)</b> | GRCC is an independent charity company that aims to support and collaborate with communities in Gloucestershire. GRCC are part of a network of 38 Rural Community Council across England, under the umbrella of ACRE (Action with Rural Communities in England) and reporting directly to DEFRA (Department for Environment, Food and Rural Affairs). |

### Overview of progress since the 2016 IDP

#### Literature, Policy and Strategy Changes

##### Summary of 2014 IDP

The IDP considered that it would be challenging for community groups and other voluntary organisations to implement the modernisation and maintenance

programmes required to respond to growth. It was considered that the District Council could provide support, including funding where possible, to support and enhance community halls and centres.

Provision of new halls was considered to be likely focussed at strategic allocations, and the IDP identified schemes at the Hunt's Grove development site as well as at Stonehouse Youth Centre. New development was seen as an opportunity to provide training, apprenticeships and employment for young people.

The 2014 IDP identified costs of circa £6.8m to serve the proposed development scenario for the Stroud Local Plan (2015) in terms of providing new community and cultural facilities.

The overarching strategy for library services was to maintain and enhance the existing library network by introducing technology and providing more outreach services to the elderly. It was estimated that the total development set out in the Stroud Local Plan (2015) would require approximately 500sqm of additional library floorspace at a cost of £1.8m.

### Changes since 2014 IDP: Overarching Documents

**Revised National Planning Policy Framework (2019):** The NPPF is underpinned by the principles of sustainable development, including the objective to 'support strong, vibrant and healthy communities' (Paragraph 8). Specifically, the NPPF (Paragraph 20) requires strategic policies set out the pattern, scale and quality of development, and make sufficient provision for community facilities.

To provide the social, recreation and cultural facilities and services the community needs, planning policies should: "plan positively for the provision and use of shared spaces, community facilities... guard against the unnecessary loss of valued facilities and services and ensure that established facilities and services are able to develop and modernise and are retained for the benefit of the community" (NPPF Paragraph 92).

**Championing archives and libraries within Local Planning (2019):** This Arts Council document provides guidance on the planning process including securing



planning obligations to deliver new or improved library infrastructure. It highlights the opportunities for libraries derived from the neighbourhood plan ‘top-slice’ and defines what contributions could pay for. It advises that generally residential development over 50 dwellings would require additional library provision and that if an extension to or new library is required, costs will be determined at the time of the planning application and based on the RCIS BCIS Tender Price Index and new build prices. Where extra demand leads to stock only, a contribution will be required.

**Gloucestershire County Council Strategy ‘Looking to the Future’ (2019-2022)<sup>105</sup>**: The GCC strategy outlines the intention to encourage and extend the use of the Council’s 31 libraries [of which Berkeley, Dursley, Minchinhampton, Nailsworth, Painswick, Quedgeley, Stonehouse, Stroud and Wotton-under-Edge are within Stroud]. It also sets out that library services in Gloucestershire’s three major centres, including Stroud, would be enhanced.

As outlined in the 2014 IDP, the **Big Community Offer** was initiated in 2010-11 as part of Gloucestershire County Council’s (GCC) approach to managing a forecast council budget shortfall of £125 million (to 2014). The offer was property-led for youth and library buildings.

This enabled communities to purchase their local library at a 20% discount against market value, to move the location of the library or to rent the premises at a peppercorn rate. As of 2016, 8 community libraries were established<sup>106</sup>.

There is no single county or district-wide strategy for community centres.

The **Gloucestershire Library Strategy** has not been updated since the 2014 IDP, with the most recent county-wide strategy having been published in 2012.

<sup>105</sup> Gloucestershire County Council (2019) Looking to the Future. Available: <https://www.gloucestershire.gov.uk/council-and-democracy/corporate-plans-and-strategies/looking-to-the-future-new-council-strategy/>

<sup>106</sup> Source; <https://www.gov.uk/government/case-studies/community-libraries-in-gloucestershire>

<sup>107</sup> Stroud District Council (2021) Stroud Local Plan Review Pre-submission Draft Plan. Available: <https://www.stroud.gov.uk/environment/planning-and-building-control/planning-strategy/stroud-district-local-plan-review>

**Stroud District Council Pre-submission Draft Local Plan (2021)<sup>107</sup>**: The Pre-submission Draft Local Plan states that “there is generally a good spread of community halls across the District. In some locations their upgrading will help to meet community needs where access to more centrally planned leisure centres is difficult.” The Draft Local Plan supports the planned provision of new community facilities alongside housing growth.

**Stroud District Council Planning Obligations SPD (2017)<sup>108</sup>**: This SPD sets out that new community facilities and improvements to existing facilities will be funded through CIL, except where developments can provide their requirements on-site. It sets out that new community buildings are required on the West of Stonehouse, North East Cam and Hunts Grove allocations and that these should be provided by the developer.

**Neighbourhood Plans<sup>109</sup>**: A total of nine neighbourhood development plans have been ‘made’ since the 2014 version of the IDP has been published. Each of the neighbourhoods have policies which seek to improve and protect existing community facilities. The following Neighbourhood Plans include land allocated within the 2015 Local Plan or the Pre-submission Draft Local Plan for community uses:

- **The Hardwicke Neighbourhood Development Plan (2017)<sup>110</sup>** outlines the need for new community facilities and services as part of the Hunts Grove Development.
- The consultation carried out for the **Stonehouse Neighbourhood Plan (2018)<sup>111</sup>** identified a need for a large, high quality community hall, however no formal scheme has been identified developed to date.

<sup>108</sup> Stroud District Council (2017) Planning Obligations SPD. Available: <https://www.stroud.gov.uk/media/241797/planning-obligations-spd-final.pdf>

<sup>109</sup> Available: <https://www.stroud.gov.uk/environment/planning-and-building-control/planning-strategy/neighbourhood-planning/made-neighbourhood-plans>

<sup>110</sup> Hardwicke Parish Council (2017) Neighbourhood Development Plan 2015-2031. Available: <https://www.stroud.gov.uk/media/355899/hardwicke-ndp-final-document-july-2017.pdf>

<sup>111</sup> Stonehouse Town Council (2018) Neighbourhood Development Plan 2016-2031. Available: <https://www.stroud.gov.uk/media/356555/snp-referendum-10-17-web.pdf>

## Scheme and Project Delivery

### Schemes since 2014: Community and Culture

- **New library building in Berkeley:** Planning permission was granted in 2016 to replace the existing library building, which is considered to not be fit for purpose. £120,000 has been raised through donations towards the cost of a new build but a further £150,000 is required to start building.
- **West of Stonehouse Community Centre:** The outline application for the West of Stonehouse (Great Oldbury) strategic development site secured the provision of a new community facility. Once complete, the hall will be transferred to the ownership of the Parish Council.
- **Hunts Grove Community Centre and Neighbourhood Centre:** Outline planning application secured a community centre and a neighbourhood centre, and reserved matters applications have been submitted (S.20/0103/REM and S.20/0104/REM) to approve the details of these facilities.
- **Littlecombe, Dursley Contribution:** A contribution was secured via s.106 agreement at the St. Modwen development in Dursley to improve existing community facilities.
- **The Skills for Stroud Employability Charter:** Set up in 2015, this scheme is aimed at improving the quality and availability of work placements for young people in Stroud.

### Assessment of Current Infrastructure Provision

The Gloucestershire Rural Community Council ‘Village Hall Finder’ outlines that there are over 90 Halls in the Stroud District, the details of which are included within Table 46 below.

Table 46 Stroud Community Centres

| Cluster                     | Community Centre                              | Address  |
|-----------------------------|---|--|
| Stroud Valleys              | Amberley Parish Hall                          | Amberley Parish Hall, Stroud, GL5 5JG                                  |
|                             | Arkeil Community Centre                       | Nympsfield Rd, Nailsworth, Stroud GL6 0BG                              |
|                             | Arlingham Village Hall                        | High Street, Arlingham, GL2 7JN  |
|                             | Box Village Hall                              | Box, Stroud GL6 9HE  |
|                             | Brimscombe & Thrupp Social Centre             | London Rd, Brimscombe, Stroud GL5 2RT                                  |
|                             | Bussage Village Hall                          | The Ridge, Bussage, Stroud GL6 8AZ                                     |
|                             | Cainscross Victory Park Pavilion              | The Pavilion in the Park, Lower Church Road, Church Rd, Stroud GL5 4JE |
|                             | Cashes Green Youth and Social Centre Hall     | 1-3 Queen's Dr, Cashes Green, Stroud GL5 4NR                           |
|                             | Chalford Church Rooms                         | Lynch Rd, Stroud GL6 8LL   |
|                             | Chalford Hill Methodist Church Rooms          | Midway, Chalford Hill GL6 8EN  |
|                             | Chalford Village Hall                         | Chalford Village Hall, London Rd, Chalford, Stroud GL6 8HN             |
|                             | Christchurch Hall & Church Rooms              | New Market Rd, Nailsworth GL6 0DQ                                      |
|                             | Church of Latter Day Saints                   | 16 Nelson St, Stroud GL5 2HL   |
|                             | Eastcombe Village Hall                        | Eastcombe, Stroud GL6 7EB  |
| Frith Youth Centre, Bussage | Frith Youth Centre, Brownhill, Stroud GL6 8AF |  |

| Cluster | Community Centre                      | Address  |
|---------|---------------------------------------|--|
|         | Horsley Village Hall and Pavilion     | Horsley Community Shop, The Pavilion, Priory Fields, Horsley, Stroud GL6 0PT |
|         | Minchinhampton Market House           | 1-2 Market Square, Minchinhampton, Stroud GL6 9BW                            |
|         | Mortimer Room, Nailsworth             | Old Market, Stroud, GL6 0DU  |
|         | Nailsworth Parochial Church Hall      | New Market Rd, Nailsworth GL6 0DQ  |
|         | Nailsworth Town Hall                  | Town Hall, Old Bristol Rd, Nailsworth, Stroud GL6 0JF                        |
|         | Nailsworth Youth Club                 | Northfield Rd, Stroud GL6 0LZ  |
|         | North Woodchester Village Hall        | Church Rd, North Woodchester, Stroud GL5 5PQ                                 |
|         | NYCE – Nailsworth Boys Club           | Bath Road, Nailsworth, Gloucestershire GL6 0HH                               |
|         | Pagenhill Maypole Hall                | Maypole Hall, Stratford Road, Stroud GL5 4AN                                 |
|         | Rodborough Community Hall             | The Community Hall, Butterow W, Stroud GL5 3TZ                               |
|         | Rodborough Endowed School Committee   | Church Place, Rodborough, GL5 3NF  |
|         | Rodborough Tabernacle                 | Tabernacle Walk, Rodborough, Stroud GL5 3UJ                                  |
|         | St Augustine’s Church Hall, Eastcombe | 2 Dr Crouch's Rd, Stroud GL6 7EA   |
|         | St Barnabas Church Hall, Box          | Stroud Rd, Gloucester GL1 5LJ  |

| Cluster            | Community Centre                                    | Address  |
|--------------------|---|--|
|                    | St George’s Church, Nailsworth                      | Church St, Nailsworth GL6 0BP  |
|                    | St Lawrence Church Hall, Stroud                     | The Shambles, Stroud GL5 1AP   |
|                    | St Martin’s Church Hall, Horsley                    | 3 Priory Fields, Horsley, Stroud GL6 0PT                                 |
|                    | St Mary’s Church Hall, Kingswood, Wotton-Under-Edge | Church Rd, North Woodchester, Stroud GL5 5PD                             |
|                    | St Matthews Church Hall, Stroud                     | St Matthews Church Hall, Stroud, GL5 4JE                                 |
|                    | The Pavilion, Stroud                                | London Rd, Brimscombe, Stroud GL5 2TL                                    |
|                    | Trinity Rooms, Stroud                               | Stroud GL5 2HZ   |
|                    | Whiteshill and Ruscombe Village Hall                | Stroud GL6 6AB   |
|                    | Woodchester Village Hall Trust                      | Church Rd, North Woodchester, Stroud GL5 5PQ                             |
| Stonehouse Cluster | All Saints Church, Selsley                          | All Saints Church, Selsley, GL5 5LE                                      |
|                    | Eastington Village Hall                             | Millend Ln, Eastington, Stonehouse GL10 3AT                              |
|                    | Kings Stanley Village Hall                          | Marling Close, King's Stanley, Broad Street, Stonehouse GL10 3PN         |
|                    | Leonard Stanley Village Hall                        | Leonard Stanley Village Hall, 3LP, Marsh Rd, Leonard Stanley, Stonehouse |
|                    | Nymphsfield Village Hall                            | Church St, Stonehouse GL10 3UB   |
|                    | Oldends Lane Pavilion, Stonehouse                   | Oldends Lane, Stonehouse GL10 2DG  |

| Cluster                                  | Community Centre                         | Address  |
|--|--|--|
|  | Owen Harris Memorial Ground, Eastington  | OHMG Building, Snakey Lane, Eastington, Nr Stonehouse GL10 3AQ |
|  | Selsley Scout Headquarters               | Selsley Scout HQ, The Old Forge, Selsley, Stroud, GL5 5LB      |
|  | St Bartholomew's Church, Nympsfield      | Stonehouse GL10 3UR  |
|  | St George's Church Hall, Kings Stanley   | King's Stanley, Stonehouse GL10 3HJ                            |
|  | St Swithins Church Hall, Leonard Stanley | Downton Road, Leonard Stanley, Gloucestershire GL10 3LT        |
|  | Standish Village Hall                    | Standish Ln, Standish, Stonehouse GL10 3DW                     |
|  | Stonehouse Community Centre              | Laburnum Rd, Stonehouse GL10 2NS                               |
|  | Cam & Dursley                            | Arthur Winterbotham Memorial Hall                              |
| Ashmead Village Hall                     |  | Cam Green, Cam Dursley, Gloucestershire GL11 5HN               |
| Cam Methodist Church Rooms               |  | 4 Noel Lee Way, Cam, Gloucestershire GL11 5PS                  |
| Coaley Village Hall                      |  | The St, Coaley, Dursley GL11 5EG                               |
| Dursley & District Community Association |  | Rednock Dr, Dursley GL11 4BX                                   |
| Dursley Methodist Church                 |  | Castle St, Dursley GL11 4HN                                    |
| Dursley Tabernacle                       |  | Parsonage St, Dursley GL11 4BJ                                 |
| Dursley Town Hall                        |  | 6 Market Pl, Dursley GL11 4AB                                  |
| North Nibley Congregational Hall         |  | 17 Barrs Lane, GL11 6DT  |

| Cluster           | Community Centre                     | Address  |
|-------------------|--------------------------------------|--|
|                   | North Nibley Village Hall            | North Nibley Village Hall, Innocks Estate, GL11 6DP                            |
|                   | St Bartholomew's Church Hall, Cam    | The Street, Coaley, Dursley GL11 5EB   |
|                   | St Dominic's Church Hall, Dursley    | Jubilee Rd, Dursley GL11 4ES   |
|                   | St Giles' Church Hall, Uley          | 76 The St, Uley, Dursley GL11 5SJ  |
|                   | St James Parish Centre, Broadwell    | Silver St, Dursley GL11 4JE  |
|                   | Stinchcombe Village Hall             | The Street, Dursley GL11 6AW   |
|                   | Uley Village Hall                    | The St, Uley, Dursley, GL11 5SJ  |
|                   | Woodfield Youth and Community Centre | Frederick Thomas Rd, Dursley GL11 6LY  |
| Gloucester Fringe | Brookthorpe Village Hall             | Stroud Road, Brookthorpe GL4 0UR   |
|                   | Brockworth Community Centre          | Court Road, Brockworth, Gloucester, GL3 4ET                                    |
|                   | Hardwicke Village Hall               | Green Ln, Hardwicke GL2 4QA  |
|                   | Harescombe Village Hall/Parish Room  | Harescombe, Gloucestershire, GL4 0XD   |
|                   | Haresfield Village Hall              | Haresfield, GL10 3EG   |
|                   | Upton St Leonards Sports Pavilion    | The Recreation Ground, Birchall Lane, Upton St Leonard GL4 8AD                 |
|                   | Upton St Leonards Village Hall       | Upton St Leonards Playgroup, Bondend Rd, Upton St Leonards, Gloucester GL4 8AG |
| Berkeley Cluster  | Berkeley Congregational Church       | Salter Street. Berkeley. Gloucestershire, GL13 9BS                             |

| Cluster            | Community Centre                             | Address  |
|--------------------|--|--|
|                    | Berkeley Evangelical Church                  | 1 Lynch Road, Berkeley, Gloucestershire. GL13 9TA                            |
|                    | Berkeley Town Hall                           | The Traffic SEO, Market Pl, Berkeley GL13 9BD                                |
|                    | Canon Park Recreation Ground                 | Canon Park, Berkeley, GL13 9DF   |
|                    | Randwick Village Hall                        | 1 Chapel Fields, Randwick, Stroud GL6 6HS                                    |
|                    | Sharpness Village Hall                       | Oldminster Rd, Berkeley GL13 9NA   |
|                    | Sheepscombe Village Hall                     | Sheepscombe, Stroud GL6 7RQ  |
|                    | Slimbridge Sports Pavilion                   | Slimbridge Village Hall, St Johns Road, GL2 7DF                              |
|                    | Stone Village Hall                           | 54 Court Meadow, Stone, Berkeley GL13 9LR                                    |
| The Severn Vale    | Elmore Village Hall                          | Elmore, Gloucestershire, GL2 3NT   |
|                    | Cadbury Hall (was Frampton Community Centre) | Lake Ln, Frampton on Severn, Gloucester GL2 7HG                              |
|                    | Frampton-on-Severn Village Hall              | The St, Frampton on Severn, Gloucester GL2 7EA                               |
|                    | Saul Memorial Hall                           | Saul Under Fives Playgroup, Memorial Hall, High St, Saul, Gloucester GL2 7JD |
|                    | Slimbridge Village Hall                      | Slimbridge Village Hall, St Johns Road, Slimbridge, GL2 7DF                  |
|                    | Whitminster Village Hall                     | Whitminster, Gloucester GL2 7NN  |
| The Wotton Cluster | Hillesley Hall                               | Hopkins Hall, Hillesley, Wotton-under-Edge GL12 7RF                          |

| Cluster                       | Community Centre                                    | Address  |                               |
|-------------------------------|---|--|-------------------------------|
|                               | Kingswood Village Hall                              | Wickwar Road, Kingswood, Wotton-Under-Edge, Gloucestershire GL12 8RF |                               |
|                               | St Giles' Church Hall, Hillesley                    | Hillesley, Wotton-under-Edge GL12 7RD                                |                               |
|                               | St Mary's Church Hall, Kingswood, Wotton-Under-Edge | Church Rd, North Woodchester, Stroud GL5 5PD                         |                               |
|                               | United Church, Wotton-Under-Edge                    | 27 Bradley St, Wotton-under-Edge GL12 7AR                            |                               |
|                               | Wotton Baptist Church & School Room Hall            | Rope Walk, Wotton-under-Edge GL12 7AA                                |                               |
|                               | Wotton Community Sports Foundation                  | New Road, Wotton-under-Edge, Gloucestershire, GL12 8JW               |                               |
|                               | The Cotswold Cluster                                | Bisley Methodist Church  | High Street, Bisley, GL6 7AA  |
|                               |   | Bisley WI Village Hall   | Manor Street, Bisley, GL6 7AX |
| Christ Church Hall, Painswick |   | Gloucester Street, Painswick, GL6 6QN                                |                               |
| Cranham Village Hall          |   | Cranham, Gloucester GL4 8HP  |                               |
| Edge Village Hall             |   | The Green, Edge, GL6 6PA   |                               |
| Elmore Village Hall           |   | Elmore, Gloucestershire, GL2 3NT                                     |                               |
| Miserden Village Hall         |   | Miserden, Stroud GL6 7JA   |                               |
| Oakridge Village Hall         |   | Oakridge Lynch, Stroud GL6 7NZ                                       |                               |
| Painswick Centre              |   | Bisley St, Painswick, Stroud GL6 6QQ                                 |                               |
| Painswick RFC & Sports Club   |   | A46 Stroud Rd, Painswick, Stroud GL6 6UZ                             |                               |

| Cluster | Community Centre        | Address   |
|---------|-------------------------|---|
|         | Painswick Town Hall     | The Town Hall, Painswick GL6 6QA                        |
|         | Pitchcombe Village Hall | Pitchcombe, Stroud GL6 6LP                              |
|         | Whiteway Colony Hall    | Colony Hall, Whiteway, Stroud, Gloucestershire, GL6 7ER |

There is a total of eight public libraries within Stroud, listed below. Quedgeley library provides services to residents of Stroud living in the Gloucester Fringe and Severn Vale.

Table 47 Libraries within Stroud District.

| Name / Location of Library       | Details  |
|----------------------------------|--|
| Berkeley Community Library       | Community-led. Open Tues, Fri and Sat. 15 hours p/w.   |
| Dursley Library                  | Open Mon-Sat. 44 hours p/w.  |
| Minchinhampton Community Library | Community-led. Open Mon, Tues and Thurs-Sat. 23 hours p/w.   |
| Nailsworth Library               | Open Mon-Sat. Includes self-service kiosks and is unstaffed at certain points within the week. 39 hours p/w. |
| Painswick Community Library      | Community-led. Open Mon, Weds, Fri and Sat. 12 hours p/w.  |
| Stonehouse Library               | Open Mon, Weds, Thurs and Sat. 12 hours p/w.   |
| Stroud Library                   | Open Mon-Sat. 44 hours p/w.  |
| Wotton-under-Edge Library        | Open Tues, Weds, Fri and Sat. 22 hours p/w,  |
| Quedgeley Library                | Open Mon-Sat. 35 hours p/w.  |

Three of the libraries within Stroud District are community-led and were transferred to local community groups as part of the Big Community Initiative.

<sup>112</sup>Sport England (2001) Village and Community Halls Design Guidance Note <http://direct.sportengland.org/media/4336/village-and-community-halls.pdf>

## Planned Provision and Scheme Identification based on revised Housing and Employment Needs

### District-wide benchmarks and requirements

In terms of future provision, the Sport England Village and Community Halls Design Guidance<sup>112</sup> and Shaping Neighbourhoods<sup>113</sup> have been utilised to determine the appropriate sizes and the demands for new community facilities arising from development. The costs for new facilities are based on Building Cost Information Services as per the 2014 IDP.

Table 48 outlines the expected demands for new or improved community centres within the strategic and local development sites.

The Gloucestershire Rural Community Council (GRCC) outlined during consultation that in order to encourage community buy-in to venues, that early engagement is undertaken to ascertain the wants and needs of local communities and where deemed appropriate, improvements could be made to existing facilities rather than providing new buildings as this can create challenges in terms of the onward management of new venues.

It is recommended by the GRCC that to maximise usage, community centres are utilised as mixed-use neighbourhood hubs with workspaces, cafés or faith rooms.

The Arts Council guidance on the planning system (2019) has been used to calculate demands and costs associated with libraries for those sites under 50 units. The Arts Council guidance on planning obligations (2012) has been utilised for those sites over 50 dwellings that may require improvements to infrastructure or a new library. It should be noted that the guidance sets out that costs must be determined at the time of the planning application and may as a result be different to those calculated within

|  | Site Allocation | Ward Cluster |
|--|-----------------|--------------|
|--|-----------------|--------------|

<sup>113</sup> Barton et al (2003) Shaping Neighbourhoods: For Local Health and Global Sustainability

| Ref                     |  |   | The nearest libraries and access to 2040 | Hours of the chapter identifies the nearest community facilities and details extracted from the Local Plan Review | Demand (sqm)   | Cost (£)             |
|-------------------------|--|---|--|---|----------------|----------------------|
| PS24                    | Cam North West (West of Draycott)            | Cam & Dursley Rural Community Council, 2115 | 900                                      |   | 341.04         | £511,566             |
| PS25                    | Cam North East Extension (East of River Cam) | Cam & Dursley                               | 180                                      | 423   | 68.21          | £102,313             |
| PS28                    | Dursley                                      | Cam & Dursley                               | 10                                       | 24  | 3.79           | £5,684               |
| PS19a                   | Stonehouse North West                        | Stonehouse Cluster                          | 700                                      | 1645  | 265.26         | £397,884             |
| PS16 & PS42             | Leonard Stanley                              | Stonehouse Cluster                          | 40                                       | 94  | 15.16          | £22,736              |
| PS17                    | Stonehouse                                   | Stonehouse Cluster                          | 10                                       | 24  | 3.79           | £5,684               |
| PS01 & PS02             | Brimscombe & Thrupp                          | Stroud Valleys                              | 190                                      | 447   | 72.00          | £107,997             |
| PS05                    | Minchinhampton                               | Stroud Valleys                              | 80                                       | 188   | 30.32          | £45,473              |
| PS06 & PS07             | Nailsworth                                   | Stroud Valleys                              | 90                                       | 212   | 34.10          | £51,157              |
| PS10, PS11, PS12 & PS13 | Stroud                                       | Stroud Valleys                              | 165                                      | 388   | 62.52          | £93,787              |
| PS34                    | Sharpness Docks                              | Berkeley Cluster                            | 300                                      | 705   | 113.68         | £170,522             |
| PS36                    | Sharpness (Garden Village)                   | Berkeley Cluster                            | 2400                                     | 5640  | 909.45         | £1,364,175           |
| PS37                    | Wisloe (Garden Village)                      | Berkeley Cluster                            | 1500                                     | 3525  | 568.41         | £852,609             |
| PS33                    | Berkeley                                     | Berkeley Cluster                            | 170                                      | 400   | 64.42          | £96,629              |
| PS35                    | Newtown & Sharpness                          | Berkeley Cluster                            | 70                                       | 165   | 26.53          | £39,788              |
| PS41                    | Painswick                                    | Cotswold Cluster                            | 20                                       | 47  | 7.58           | £11,368              |
| G1                      | South of Hardwicke                           | Gloucester Fringe                           | 1350                                     | 3173  | 511.57         | £767,348             |
| PS30                    | Hunts Grove Extension                        | Gloucester Fringe                           | 750                                      | 1763  | 284.20         | £426,305             |
| HAR017                  | Hardwicke                                    | Gloucester Fringe                           | 10                                       | 24  | 3.79           | £5,684               |
| G2                      | Land at Whaddon                              | Gloucester Fringe                           | 3000                                     | 7050  | 1136.81        | £1,705,219           |
| PS44                    | Frampton-on-Severn                           | The Severn Vale                             | 30                                       | 71  | 11.37          | £17,052              |
| PS45 & PS46             | Whitminster                                  | The Severn Vale                             | 50                                       | 118   | 18.95          | £28,420              |
| PS38                    | Kingswood                                    | The Wotton Cluster                          | 50                                       | 118   | 18.95          | £28,420              |
| <b>TOTAL</b>            |  |   | <b>12065</b>                             | <b>28353</b>  | <b>4571.88</b> | <b>£6,857,821.41</b> |

Table 49.



Table 48 Community Facilities Requirements

| Ref                     | Site Allocation                              | Ward Cluster       | Housing Delivery to 2040 | Population   | Community Centres |                      |
|-------------------------|--|--------------------|--------------------------|--------------|-------------------|----------------------|
|                         |  |                    |                          |              | Demand (sqm)      | Cost (£)             |
| PS24                    | Cam North West (West of Draycott)            | Cam & Dursley      | 900                      | 2115         | 341.04            | £511,566             |
| PS25                    | Cam North East Extension (East of River Cam) | Cam & Dursley      | 180                      | 423          | 68.21             | £102,313             |
| PS28                    | Dursley                                      | Cam & Dursley      | 10                       | 24           | 3.79              | £5,684               |
| PS19a                   | Stonehouse North West                        | Stonehouse Cluster | 700                      | 1645         | 265.26            | £397,884             |
| PS16 & PS42             | Leonard Stanley                              | Stonehouse Cluster | 40                       | 94           | 15.16             | £22,736              |
| PS17                    | Stonehouse                                   | Stonehouse Cluster | 10                       | 24           | 3.79              | £5,684               |
| PS01 & PS02             | Brimscombe & Thrupp                          | Stroud Valleys     | 190                      | 447          | 72.00             | £107,997             |
| PS05                    | Minchinhampton                               | Stroud Valleys     | 80                       | 188          | 30.32             | £45,473              |
| PS06 & PS07             | Nailsworth                                   | Stroud Valleys     | 90                       | 212          | 34.10             | £51,157              |
| PS10, PS11, PS12 & PS13 | Stroud                                       | Stroud Valleys     | 165                      | 388          | 62.52             | £93,787              |
| PS34                    | Sharpness Docks                              | Berkeley Cluster   | 300                      | 705          | 113.68            | £170,522             |
| PS36                    | Sharpness (Garden Village)                   | Berkeley Cluster   | 2400                     | 5640         | 909.45            | £1,364,175           |
| PS37                    | Wisloe (Garden Village)                      | Berkeley Cluster   | 1500                     | 3525         | 568.41            | £852,609             |
| PS33                    | Berkeley                                     | Berkeley Cluster   | 170                      | 400          | 64.42             | £96,629              |
| PS35                    | Newtown & Sharpness                          | Berkeley Cluster   | 70                       | 165          | 26.53             | £39,788              |
| PS41                    | Painswick                                    | Cotswold Cluster   | 20                       | 47           | 7.58              | £11,368              |
| G1                      | South of Hardwicke                           | Gloucester Fringe  | 1350                     | 3173         | 511.57            | £767,348             |
| PS30                    | Hunts Grove Extension                        | Gloucester Fringe  | 750                      | 1763         | 284.20            | £426,305             |
| HAR017                  | Hardwicke                                    | Gloucester Fringe  | 10                       | 24           | 3.79              | £5,684               |
| G2                      | Land at Whaddon                              | Gloucester Fringe  | 3000                     | 7050         | 1136.81           | £1,705,219           |
| PS44                    | Frampton-on-Severn                           | The Severn Vale    | 30                       | 71           | 11.37             | £17,052              |
| PS45 & PS46             | Whitminster                                  | The Severn Vale    | 50                       | 118          | 18.95             | £28,420              |
| PS38                    | Kingswood                                    | The Wotton Cluster | 50                       | 118          | 18.95             | £28,420              |
| <b>TOTAL</b>            |  |                    | <b>12065</b>             | <b>28353</b> | <b>4571.88</b>    | <b>£6,857,821.41</b> |

Table 49 Library Infrastructure Requirements

| Ref                     | Site Allocation                              | Ward Cluster             | Housing Delivery to 2040 | Population   | Libraries (Built infrastructure) |                   | Libraries (Items & Stock) |                 | Total Library Costs |
|-------------------------|--|--------------------------|--------------------------|--------------|----------------------------------|-------------------|---------------------------|-----------------|---------------------|
|                         |  |                          |                          |              | Demand (sqm)                     | Cost (£)          | Demand (items)            | Cost (£)        |                     |
| PS24                    | Cam North West (West of Draycott)            | Cam & Dursley            | 900                      | 2115         | 63.45                            | £241,110          | 3,240                     | £31,716         | £272,826            |
| PS25                    | Cam North East Extension (East of River Cam) | Cam & Dursley            | 180                      | 423          | 12.69                            | £48,222           | 648                       | £6,343          | £54,565             |
| PS28                    | Dursley                                      | Cam & Dursley            | 10                       | 24           | 0.71                             | £2,679            | 36                        | £352            | £3,031              |
| PS19a                   | Stonehouse North West                        | Stonehouse Cluster       | 700                      | 1645         | 49.35                            | £187,530          | 2,520                     | £24,668         | £212,198            |
| PS16 & PS42             | Leonard Stanley                              | Stonehouse Cluster       | 40                       | 94           | 2.82                             | £10,716           | 144                       | £1,410          | £12,126             |
| PS17                    | Stonehouse                                   | Stonehouse Cluster       | 10                       | 24           | 0.71                             | £2,679            | 36                        | £352            | £3,031              |
| PS01 & PS02             | Brimscombe & Thrupp                          | Stroud Valleys           | 190                      | 447          | 13.40                            | £50,901           | 684                       | £6,696          | £57,597             |
| PS05                    | Minchinhampton                               | Stroud Valleys           | 80                       | 188          | 5.64                             | £21,432           | 288                       | £2,819          | £24,251             |
| PS06 & PS07             | Nailsworth                                   | Stroud Valleys           | 90                       | 212          | 6.35                             | £24,111           | 324                       | £3,172          | £27,283             |
| PS10, PS11, PS12 & PS13 | Stroud                                       | Stroud Valleys           | 165                      | 388          | 11.63                            | £44,204           | 594                       | £5,815          | £50,018             |
| PS34                    | Sharpness Docks                              | Berkeley Cluster         | 300                      | 705          | 21.15                            | £80,370           | 1,080                     | £10,572         | £90,942             |
| PS36                    | Sharpness (Garden Village)                   | Berkeley Cluster         | 2400                     | 5640         | 169.20                           | £642,960          | 8,640                     | £84,576         | £727,536            |
| PS37                    | Wisloe (Garden Village)                      | Berkeley Cluster         | 1500                     | 3525         | 105.75                           | £401,850          | 5,400                     | £52,860         | £454,710            |
| PS33                    | Berkeley                                     | Berkeley Cluster         | 170                      | 400          | 11.99                            | £45,543           | 612                       | £5,991          | £51,534             |
| PS35                    | Newtown & Sharpness                          | Berkeley Cluster         | 70                       | 165          | 4.94                             | £18,753           | 252                       | £2,467          | £21,220             |
| PS41                    | Painswick                                    | Cotswold Cluster         | 20                       | 47           | 1.41                             | £5,358            | 72                        | £705            | £6,063              |
| G1                      | South of Hardwicke                           | Gloucester Fringe        | 1350                     | 3173         | 95.18                            | £361,665          | 4,860                     | £47,574         | £409,239            |
| PS30                    | Hunts Grove Extension                        | Gloucester Fringe        | 750                      | 1763         | 52.88                            | £200,925          | 2700                      | £26,430         | £227,355            |
| HAR017                  | Hardwicke                                    | Gloucester Fringe        | 10                       | 24           | 0.71                             | £2,679            | 36                        | £352            | £3,031              |
| <b>G2</b>               | <b>Land at Whaddon</b>                       | <b>Gloucester Fringe</b> | <b>3000</b>              | <b>7050</b>  | 211.50                           | £803,700          | 10,801                    | £105,720        | £909,420            |
| PS44                    | Frampton-on-Severn                           | The Severn Vale          | 30                       | 71           | 2.12                             | £8,037            | 108                       | £1,057          | £9,094              |
| PS45 & PS46             | Whitminster                                  | The Severn Vale          | 50                       | 118          | 3.53                             | £13,395           | 180                       | £1,762          | £15,157             |
| PS38                    | Kingswood                                    | The Wotton Cluster       | 50                       | 118          | 3.53                             | £13,395           | 180                       | £1,762          | £15,157             |
| <b>TOTAL</b>            |  |                          | <b>12065</b>             | <b>28353</b> | <b>850.58</b>                    | <b>£3,232,213</b> | <b>43,436</b>             | <b>£425,171</b> | <b>£3,657,384</b>   |

\*The red text denotes those sites that are not currently proposed to meet the housing needs of Stroud District Council.

## Stroud Valleys

The levels of growth proposed within the Stroud Valleys area are unlikely to warrant the creation of new community centres or libraries. The Local Plan Review notes that generally the provision of community facilities within the Valleys is very good. This is reflected by the large number of existing facilities such as the Stroud, Minchinhampton and Nailsworth Libraries, the Brimscombe & Thrupp Social Centre Frith Youth Centre, Minchinhampton Market House, Arkell Community Centre, and the Cashes Green Youth and Social Centre Hall.

Should a contribution be required from these local development sites, it is expected that the cost of providing new community facilities for 525 homes would be circa £300,000. The cost for both new library buildings and stock is expected to be around £160,000.

## Stonehouse Cluster

The outline application for the West of Stonehouse (Great Oldbury) strategic development site secured the provision of a new community facilities, however it is expected that a further community centre would be provided on the proposed Stonehouse North West strategic development site. It is expected that this would need to be at least **265sqm in size and cost in the region of £400,000. A contribution to libraries, based on Arts Council guidance, would total £210,000.**

The remaining levels of growth are unlikely to warrant a need to expand existing facilities, however it is noted that there is only a basic level of community facilities at Leonard Stanley where 40 homes are proposed to be allocated. A contribution may be necessary to improve these facilities is estimated at £23,000.

## Cam & Dursley

New community facilities are proposed within the allocations for the urban extension to the North West of Cam (west of Draycott). It is **estimated that this should be at least 340sqm in size at a cost of £511,000.**

**There would be demand for circa 63sqm of library space at a cost of £270,000, including stock.**

The local development sites in Cam and Dursley would be served by the excellent range of community facilities including Dursley Community Library, Stinchcombe Village Hall, Dursley & District Community Association, Dursley Town Hall and Cam Youth Centre.

## The Gloucester Fringe

An application for a new community facility within the approved Hunts Grove urban extension is under consideration by Stroud District Council. Land is also set aside as part of the outline application for this development for a place of worship.

It is expected that each of the strategic development sites; at Whaddon, South of Hardwicke and Hunts Grove will provide new community centres. These new community centres are expected to be 1,140sqm, 285sqm and 511sqm respectively. **The total cost of providing these community centres is expected to be approximately of £2.9m.**

Demand for libraries arising from development would be significant and there are no existing library services in the area, with residents reliant on travel to Gloucester. **There would be demand for 360sqm of library space at a cost of £1.54m** (including stock) and as such, there may be a requirement for provision onsite or a contribution to an existing library.

## The Berkeley Cluster

The Berkeley Library project is currently stalled whilst the local community tries to raise money to deliver a replacement building. It is likely that the

proposed levels of development would generate significant demand for library and community facilities, with an expectation that both the Sharpness and Wisloe Garden Villages providing facilities onsite. It may be the case that these demands ‘supersede’ the existing planned Berkeley Library development by providing onsite provision or support the business case for a new library.

Applying the Arts Council and Sport England standards, it is estimated that there would be a **demand for a total of 170sqm of library space at a cost of £730,000 including stock and a total of 910sqm of community space at a cost of £1.36m at Sharpness Garden Village. The Wisloe Garden Village is expected to generate demand for 105sqm of library space at a cost of £450,000 and 570sqm of community space at a cost of £850,000.**

## The Severn Vale

The levels of growth set out in the Local Plan Review Draft for Consultation are unlikely to require the creation of new or improved community or library facilities..

## The Wotton and Cotswold Clusters

Generally, within these clusters there is a good, diverse range of community facilities. Kingswood has an existing village hall whilst Painswick benefits from a library, sports club and community centre.

The levels of growth set out in the Local Plan Review are not considered to be sufficient to warrant the provision of new community facilities or libraries. Where improvements may be required, financial contributions should be secured in accordance with the Arts Council or Sport England guidance and the benchmarks outlined in Table 48 and Table 49.

## Sector-specific Funding

Gloucestershire County Council is responsible for funding the library service. The County Council’s accounts<sup>114</sup> indicate that there was approximately £700,000 worth of capital expenditure on libraries in the County. This has helped to gradually shift from physical stock towards electronic stock.

In June 2019, the Council agreed to provide capital funding for a new hybrid or electric mobile library vehicle. This also utilised existing s.106 library contributions.

Planning obligations are vital in securing new or enhanced community facilities and libraries. All allocated strategic development sites should contribute to the community by either gifting land, delivering new facilities or providing monies to improve existing facilities.

Beyond this, the delivery of new and enhancement and expansion of existing community facilities is reliant on funding from local and national charitable trusts, the Lottery and local fundraising efforts.

Funding can also be generated for the maintenance and upkeep of existing facilities through rental income generated by co-locating services and businesses within buildings, and it is recommended that a mix of uses are considered when developing new neighbourhood centres.

## Conclusions

There are over 90 community halls and buildings of various types, sizes and ages across Stroud and there is generally good coverage of community facilities within existing settlements. The establishment of community libraries through the Big Community Offer has helped to save at three of Stroud’s most rural libraries but these sites have restricted opening hours as a result.

It is expected that future improvements or additional facilities relating to housing growth should be provided in accordance with standards set out in

<sup>114</sup> Gloucestershire County Council (2019) Statement of Accounts 2018-19. Available: <https://www.gloucestershire.gov.uk/media/2090998/final-consolidated-soa-2018-19.pdf>

Table 48 and Table 49 of this report. The provision of new or improved facilities should be informed by community consultation to determine what would be of most value to local people and to ensure that the correct solution is arrived at.

# 11 Infrastructure Assessment: Emergency Services

## Responsibility for delivery

Delivery of emergency services infrastructure is divided between the following organisations in Stroud.

Table 50 Responsibilities for Delivery

| Service Provider   | Responsibility   |
|--|--|
| South Western Ambulance Service NHS Foundation Trust (SWAST) | SWAST has the responsibility of ambulance services across an area of 10,000 square miles across Gloucestershire as well as Cornwall, Devon, Somerset, Dorset and Wiltshire. It has 94 ambulance stations, three clinical control rooms, six air ambulance bases and two Hazardous Area Response teams across the counties. |
| Gloucestershire Fire and Rescue Service                      | Gloucestershire Fire and Rescue Service is part of the County Council and covers the entire county from 22 fire stations.  |
| Gloucestershire Constabulary                                 | Gloucestershire Constabulary cover approximately 1,000 square miles and is home to the Cotswolds, the Royal Forest of Dean and the Severn Vale, but also includes the urban centres of Cheltenham and Gloucester. As of March 2019, there were 1,012 police officers in the Gloucestershire Constabulary <sup>1</sup> .    |

## Overview of progress since the 2016 IDP

### Literature, Policy and Strategy Changes

**The Stroud District IDP Refresh (2014):** The previous IDP outlined that there were two ambulance stations in Stroud District, five fire stations (with a further two in Gloucester which cover the north of the District) and two police stations.

The IDP set out that all of the emergency services were adapting and modifying due to changes in structure and a consolidation of physical infrastructure was

required to enable the services to run more efficiently. The main approaches to this way of working included:

- Supporting existing ambulance and police stations with ‘standby points and policing points’, which are flexible, part-time locations with facilities for ambulances and police vehicles.
- Greater joint working between the different emergency services.
- A new Estate Strategy is to be developed following the merger of the Great Western Ambulance Service with SWAST.

Key issues and projects identified within the IDP included: refurbishment of Stroud police station; the need for a new Gloucester police station; appropriate design of new development to accommodate fire tenders; provision of fire hydrants and sprinkler systems. The following infrastructure was required on allocated sites:

- North East Cam – investment in Dursley community responder scheme required (SWAST)
- Sharpness – a community responder scheme given the isolated nature of the location (SWAST)
- Stonehouse – a facilitated ambulance standby point would be required
- Brimscombe and Thrupp – an ambulance standby point was also needed

It was estimated that an additional 20 police officer and staff posts would be required to respond to the growth set out in the 2015 Local Plan using the Association of Chief Police Officers formula<sup>115</sup>.

### Changes since 2014 IDP: Overarching Documents

**Revised National Planning Policy Framework (2019) (NPPF):** Paragraphs 8, 26, 32 and 93 of the NPPF together confirm that sustainable development means securing a safe environment through the delivery of social infrastructure needed

<sup>115</sup> Home Office (2013) Guide to the police allocation formula. Available: <https://www.gov.uk/guidance/guide-to-the-police-allocation-formula>



by communities. Paragraph 20 specifically states policies should deliver development that makes sufficient provision for security infrastructure.

Paragraphs 16, 26, 28, 32 and 38 collectively envisage this being delivered through joint working by all partners concerned with new developments.

This is expanded upon by paragraph 95, which states that planning policies and decisions should promote public safety and security requirements using the most up-to-date information available from the police; who are essential local workers providing frontline services to the public, according to Annex 2 of the NPPF.

Planning policies and decisions are expected to deliver environments where crime and disorder and the fear of crime do not undermine quality of life, the health of communities and community cohesion (paragraphs 91 and 127). this.

### Changes since 2014 IDP: Ambulance Service

**NHS England Ambulance Response Programme Review (2018)**<sup>116</sup> outlines the response of a study undertaken by the University of Sheffield, monitoring over 14 million emergency 999 calls as part of an independent academic evaluation. The Ambulance Response Programme (ARP) was established in 2015 as part of this study and the result was the creation of NHS England performance targets for ambulance services with the aim of:

- Prioritising the sickest patients, to ensure they receive the fastest response;
- Driving clinically and operationally efficient behaviours, so the patient gets the response they need first time and in a clinically appropriate timeframe;
- Putting an end to unacceptably long waits by ensuring that resources are distributed more equitably amongst all patients.

<sup>116</sup> NHS England (2018) Ambulance Response Programme Review. Available: <https://www.england.nhs.uk/wp-content/uploads/2018/10/ambulance-response-programme-review.pdf>

The performance standards are based upon the urgency of need and places a 7-minute response time on life threatening incidents and an 18-minute response time on emergency calls for potentially serious conditions.

The Report outlines that implementation of the ARP standards has had a small impact on the overall service in terms of time, but there have been efficiency gains by reducing the average allocation of resources per call.

In terms of infrastructure requirements, the implementation of ARP standards requires development to be located within a 7-minute drive by ambulance, or further investment in infrastructure may be required.

**South Western Ambulance Service Trust Strategy 2018/19 to 2020/21**<sup>117</sup> outlines the aims and objectives of SWAST over a three-year period to 2021. The previous five-year Strategy ‘the Integrated Business Plan’, which covered a period to 2019, outlined an approach to diversify and expand the ambulance service, whilst this strategy focuses on deliver core services, such as providing urgent care and responding to 999 calls.

The main aim of SWAST is “to respond quickly and safely to patients’ emergency and urgent care needs, at every stage of life, to reduce anxiety, pain and suffering.”

In terms of future demand, the Strategy outlines that the number of patient contacts is expected to rise by approximately 38% over the next 10 years. The Strategy highlights the challenges of responding to demographic increases whilst providing resilience and flexibility in an affordable manner.

Within the overall Strategy, **the Estates Strategy** aims to create cost effective and fit for purpose estate function with an infrastructure capable of supporting current and future models of service delivery. Strategic intentions of this Strategy are to:

- Provide premises that are adequate, functionally suitable and fit for purpose

<sup>117</sup> South Western Ambulance Trust (2018) Trust Strategy 2018/19 to 2020/21. Available: <https://www.swast.nhs.uk/assets/1/truststrategy201821.pdf>

- Identify and appraise stations with the aim of improving the cost effectiveness efficiency
- Maximise operational performance, whilst considering ARP.
- Replace or refurbish properties with poor functionality
- Support clinic hubs, remote triage, operational management and training
- Review support services estate, such as vehicle workshops.

**South Western Ambulance Service Integrated Corporate Performance Report (2020)**<sup>118</sup>: This report outlines the performance levels of the SWAST and defines actions to deliver improvements to the service.

The Integrated Corporate Performance Report (ICPR) highlights a 3.7% increase in ambulance incident levels in January 2020 when compared with January 2019. This compares with consistent growth of between 0-6% each month from April 2019.

The ICPR outlines a business case for additional investment based on this growth and an identified a £18m funding gap between existing resources and the level of resources required to deliver the national ARP response time standards in full across the South West. The Business Case evidenced the requirement for investment over a 2-year period including further recruitment and as part of A&E contract negotiations an additional £12m has been provided to invest in resources to deliver improvements to response times. The investment has been profiled across the two-year period based on the Trust plans, with £8m during 2019/20 and a further £4m in 2020/21. A Transformation Plan is being progressed by SWAST to address the remaining funding gap.

### Changes since 2014 IDP: Police Service

**Gloucestershire Police and Crime Plan (2017 – 2021)**<sup>119</sup> replaces the Local Policing Plan and sets out to reduce crime by involving all of Gloucestershire’s criminal justice agencies covering actions for the Police, Crown Prosecution

<sup>118</sup> South Western Ambulance Service (2020) Integrated Corporate Performance Report. Available: [https://www.swast.nhs.uk/assets/1/ipcr\\_jan2020.pdf](https://www.swast.nhs.uk/assets/1/ipcr_jan2020.pdf)

<sup>119</sup> Office of the Police and Crime Commissioner (2017) Police and Crime Plan. Available: <https://glostext.gloucestershire.gov.uk/documents/s34154/PCC%20plan%202017-2021-web.pdf>

Service, Courts, Probation Service and HM Prison Service and including community and voluntary sectors.

A refresh to the Police and Crime Plan was produced in November 2019 and outlined the following key points:

- Every crime matters in Gloucestershire – The Plan will seek to deliver the appropriate response to each crime recorded.
- Preventing rural crime – Specialised focus and consideration on rural crime management and measures.
- Making Gloucestershire a child-friendly county – Greater consideration and appropriate measures to ensure that Gloucestershire provide a child friendly police service.
- More frontline police in Gloucestershire – Increase the numbers and visibility of police on the streets in the county.
- Tackling burglary in Gloucestershire – Reduce the level of burglary crime which has increased in recent time.

### Changes since 2014 IDP: Fire and Rescue Service

**The Gloucestershire Fire and Rescue Service Integrated Risk Management Plan (IRMP) 2018-2021**<sup>120</sup>: The Plan aims to identify measure and mitigate the social and economic impact that fire and other emergencies can be expected to have on individuals, communities, commerce, industry, the environment and heritage. The IRMP identifies potential risks to public safety in Gloucestershire, assesses the effectiveness to current risk management and identifies what opportunities there are to respond to these risks and the resources needed to do so.

There are three key objectives identified within the IRMP.

- Increased focus on prevention and protection initiatives

<sup>120</sup> Gloucestershire County Council (2018) Fire Authority Integrated Risk Management Plan. Available: <https://www.gloucestershire.gov.uk/media/1519652/integrated-risk-management-plan-2018-21.pdf>

- Explore, further develop and maximise opportunities to collaborate with partners and other stakeholders
- Reconfigure and reform the Fire and Rescue Service

The key risks identified include damage to property; loss of built and natural heritage; loss of infrastructure and disruption to business. The following assets within Stroud are considered as part of the IRMP:

Table 51 Fire Risk Management Plan Assets

|        | Critical/Economic                      | Social/Environmental  | Core Infrastructure   |
|--------|--|---|---|
| Stroud | Industrial Areas;<br>Commercial Areas. | Berkeley Castle;<br>Woollen Mills;<br>Canals;<br>Woodchester Mansion;<br>Newark Park. | Sapperton Railway Tunnel;<br>M5 motorway;<br>Berkeley Power Station;<br>Royal Residences. |

**The Gloucestershire Fire and Rescue Service Annual Business Plan 2019-2020<sup>121</sup>:** The Annual Business Plan outlines the resources and finance available to fund the Service. The Plan outlines that the 2019/20 budget includes £16.3m to fund the service across the County, and includes the following additional capital programmes:

- £1.5m for equipment replacement programmes (largely digital infrastructure improvements)
- £4.5m in Grant Funding

The Plan states that the budget remains under continued pressure due to reductions in central government grant funding coupled with an increasing demand on services due to an aging population. Staff headcount has reduced

<sup>121</sup> Gloucestershire County Council (2019) Gloucestershire Fire and Rescue Service Annual Business Plan 2019-2020. Available: [https://www.gloucestershire.gov.uk/media/2090292/gfrs-annual-business-plan-19\\_20.pdf](https://www.gloucestershire.gov.uk/media/2090292/gfrs-annual-business-plan-19_20.pdf)

over the last year and recruitment of retained firefighters remains challenging due to the small geographical area in which individuals can be recruitment.

The Plan states that Gloucestershire Fire and Rescue Service remains committed to delivering efficiencies and supporting initiatives in order to meet the County Council’s ‘In Future’ programme.

## Scheme and Project Delivery

### Schemes since 2014: Police Service

- **New Gloucestershire custody suite, Quedgeley, Gloucester:** £12m complex to the south of Gloucester with custody suite capable of housing 50 detainees. Opened in 2015.<sup>122</sup>
- **New police academy and conference centre, Berkeley:** The Sabrina Centre is a new police training centre and conference facility at the former Berkeley Nuclear Power Station. Totalling £6.8m investment, the centre opened in June 2020<sup>123</sup>.

### Schemes since 2014: Fire and Rescue Service

- **Painswick Fire Station Closure:** The IRMP outlines that a review of operations identified decreases in incidents in Painswick and following consultation, decided to close Painswick Fire Station in 2016.
- **Control room upgrade:** A £300,000 refurbishment of the existing control room as part of the national development programme. To be completed by September 2020.
- **Fleet Replacement Programme:** Replacement of four aging fire engines, one aerial ladder platform and light vehicles that have reached the end of their useable life at a cost of circa £900,000. Completed in March 2020.

<sup>122</sup> Gloucestershire ICV Scheme. Available: <https://www.gloucestershire-pcc.gov.uk/gloucestershire-icv-scheme/>

<sup>123</sup> Sabrina Centre. Available: <https://www.gloucestershire-pcc.gov.uk/new-police-academy-and-conference-centre-development-at-berkeley-green/>

- **PPE Replacement:** The Fire and Rescue Service has spent approximately £600,000 between 2018 and 2020 replacement PPE (personal protective equipment). Completed in March 2020.

## Assessment of Current Infrastructure Provision

### Overview

The SWAST has 94 ambulance stations, three clinical rooms, six air ambulance bases and two Hazardous Area Response Teams (HART) across Gloucestershire. The current service provision in Stroud is an ambulance station supporting 9 ambulance response vehicles and 41 staff.

As of September 2019, the Care Quality Commission overall rating of the SWAST was good.<sup>124</sup>

Gloucestershire Constabulary operates the two policing neighbourhoods and policing teams in Stroud; Stroud Urban and Stroud Rural from two police stations supplemented by Police Points elsewhere in the district.

As outlined in the 2014 IDP, the Gloucestershire Fire and Rescue Service undertook a comprehensive review of its estate during 2005 and secured a multi-million-pound Private Finance Initiative to deliver four new fire stations around Gloucester and Cheltenham. This led to a consolidation of services, supplemented by smaller community fire stations in Stroud District in Stroud, Dursley and Wotton-under-Edge. Today, Gloucestershire Fire and Rescue Service is part of the County Council.

Table 52 outlines the ambulance, fire and rescue and police stations and other emergency service infrastructure within Stroud District by Parish Cluster.

Table 52 Emergency Services Infrastructure in Stroud District

| Parish Cluster | Station / Facility       | Notes |
|----------------|--------------------------|-------|
| Stroud Valleys | Stroud Ambulance Station |       |
|                | Stroud Police Station    |       |

| Parish Cluster         | Station / Facility  | Notes  |
|------------------------|---|--|
|                        | Nailsworth Police Point at Nailsworth Library                                     |  |
|                        | Stroud Community Fire and Rescue Station  | Full-time and on call crews  |
|                        | Nailsworth Community Fire and Rescue Station                                      | On call crew only  |
| The Stonehouse Cluster | No specific infrastructure  | Largely covered by stations in the Stroud Valleys area   |
| Cam & Dursley          | Dursley Police Station.   |  |
|                        | Dursley Community Fire and Rescue Station   |  |
| The Gloucester Fringe  | No specific infrastructure  | Largely covered by stations in Gloucester, including the Waterwells Campus on Waterwells Drive |
| The Berkeley Cluster   | Berkeley Police Point at Berkeley Town Hall<br>Police Academy / Conference Centre | Opened in June 2020  |
| The Severn Vale        | No specific infrastructure  | Largely covered by stations in Gloucester  |
| The Wotton Cluster     | Wotton-under-Edge Community Fire and Rescue Station                               | On call crew only  |
| The Cotswold Cluster   | No specific infrastructure  | Largely covered by stations in Stroud and Gloucester   |

The overall approach to the delivery of emergency services infrastructure has been one of consolidation with the centralisation of services at the Tri-Service site or Waterwells Campus, which includes Gloucestershire Constabulary HQ, the Police Investigations Hub and Gloucester Fire & Rescue Service.

<sup>124</sup> <https://www.swast.nhs.uk/welcome/about-us/care-quality-commission>

# Planned Provision and Scheme Identification based on revised Housing and Employment Needs

## District-wide requirements and benchmarks

### Ambulance Service

The South Western Ambulance Service NHS Foundation Trust strategy for future estate provision is to deliver a range of operational sites which include the development of new Hubs (Make Ready Centres) mainly close to Acute hospitals, supported by a network of Book On locations (staff start and finish shifts) and Spokes (standby points). The locations of Hubs have been modelled for proximity to major receiving hospitals in order to drive efficiencies in the operating model. Each Hub development will be subject to a detailed business case for approval by the Trust.

The business case for the future ambulance service Gloucestershire is currently being prepared and will include a Hub in location, to be determined. The location will provide ambulance vehicle preparation, vehicle maintenance workshops, training facilities and staff welfare accommodation as well as County Commander offices and other support functions.

There are no benchmarks for the ambulance service to assess future demand associated with housing growth. Instead, SWAST’s budget is determined each year dependent on demographic change. This can result in a delay between the delivery of housing and infrastructure improvements being implemented by the ambulance service.

### Police Service

The recruitment freeze highlighted within the 2014 IDP has been removed, and following the opening of the Sabrina Centre training academy, the Constabulary intends to recruit more than 300 officers and staff over the next three years to 2023.

The Constabulary no longer utilise the Association of Chief Police Officers formula to understand the costs of delivering increases in services associated with housing growth. Instead, a county-level assessment has been developed by Gloucestershire Constabulary (2020) which is informed by the number of police incidents within a parish (where available) or district. This information is divided by total number of existing houses in the area to determine a number of incidents per existing dwelling. Each incident has an implication on policing demand and a cost, which then can be multiplied by the incidents by existing dwelling and then by the number of proposed dwellings:

$$\text{Demand for police staff} = \frac{\text{Total no. of incidents}}{\text{Total no. existing homes}} \times \text{Cost per incident} \times \text{proposed no. of dwellings}$$

This formula has been applied to the list of strategic development sites set out in the Pre-submission Draft Local Plan. The benchmarks are not applied to the local development sites as these are largely within existing urban areas and the levels of development are such that demands are not expected to significantly increase. The infrastructure costs include staffing such as uniform, training and vehicles, technology and premises (where appropriate). The outcomes are included within Table 53 overleaf.

### Fire and Rescue Service

Gloucestershire Fire and Rescue Service outlines within its business plan that it intends to continue evaluate capacity of Fire Protection and will look to share functions, services and response options with other organisations wherever possible to deliver efficiencies.

A Structural Change programme will aim to ensure services are designed to deliver the Integrated Risk Management Plan (IRMP) and maximise resources. The IRMP undertakes ongoing upgrades to its control room and standby control room as well as maintenance of its fleet.

GFRS' budget is determined each year dependent on demographic change. This can result in a delay between the delivery of housing and improvements being implemented by the fire and rescue service.

Developments should be designed to accommodate fire tenders, provide water supply (such as fire hydrants) onsite and commercial sites should include sprinkler systems.

Table 53 Assessment of Policing Demand and Costs

| Ref          | Site Allocation                              | Ward Cluster          | Housing Delivery to 2040 | Population | Police requirements - additional staff | Police requirements with premises contribution | Police requirements without premises contribution |
|--------------|--|-----------------------|--------------------------|------------|--|--|---|
| PS24         | Cam North West (West of Draycott)            | Cam & Dursley         | 900                      | 2115       | 5                                      | £206,449                                       | £47,109   |
| PS25         | Cam North East Extension (East of River Cam) | Cam & Dursley         | 180                      | 423        | 1                                      | £45,009  | £12,180   |
| PS19a        | Stonehouse North West                        | Stonehouse Cluster    | 700                      | 1645       | 4                                      | £153,834                                       | £35,234   |
| PS34         | Sharpness Docks                              | The Berkeley Cluster  | 300                      | 705        | 2                                      | £72,781  | £18,066   |
| PS36         | Sharpness (Garden Village)                   | The Berkeley Cluster  | 2400                     | 5640       | 14                                     | £558,505                                       | £121,077  |
| PS37         | Wisloe (Garden Village)                      | The Berkeley Cluster  | 1500                     | 3525       | 9                                      | £350,211                                       | £76,929   |
| G1           | South of Hardwicke                           | The Gloucester Fringe | 1350                     | 3172.5     | 8                                      | £401,111                                       | £71,101   |
| PS30         | Hunts Grove Extension                        | The Gloucester Fringe | 750                      | 1762.5     | 4                                      | £176,780                                       | £40,139   |
| G2           | Land at Whaddon                              | The Gloucester Fringe | 3000                     | 7050       | 15                                     | £697,741                                       | £151,178  |
| <b>Total</b> |  |                       |                          |            | 62                                     | £2,662,421                                     | £573,013  |

\*The red text denotes those sites that are not currently proposed to meet the housing needs of Stroud District Council.



## The Stroud Valleys

### Ambulance Service

The current planning assumptions and modelling associated with the Gloucestershire business case supports a continued presence in Stroud. Provision under the business case will ensure that SWAST can meet the expected growth in demand over the next ten years which will likely require expansion from the current site.

At Brimscombe and Thrupp, SWAST raised concerns that it would not be possible to responding to an emergency within acceptable time limits. A facilitated standby point will be required.

### Police Service

The planned refurbishment of Stroud Police Station outlined in the 2014 IDP has not been implemented as it was considered to be too expensive and an inefficient use of the existing building. Whilst the existing site is suitable at present, through consultation Gloucestershire Constabulary highlighted that it was looking for an alternative accommodation. This would likely be within an existing building in Stroud's town centre, rather than a new development.

### Fire Service

The existing fire station at Stroud will remain, and there are no plans for expansion or improvement at the time of writing.

## The Stonehouse Cluster

### Ambulance Service

Subject to the provision of a standby point / community response at the existing West of Stonehouse strategic development site (Great Oldbury), there would be sufficient coverage for the ambulance service.

### Police Service

The proposed strategic development site at North West of Stonehouse would likely result in an **additional demand for four police staff at a cost of up to £154,000.**

The sites would likely be policed from Stroud or Dursley Police Stations and whilst response times would not be an issue (given that the Constabulary currently serve these areas), there would likely be an increase in incidents as a result of the increase in population that would place further demands on the service.

## Cam & Dursley

### Ambulance Service

There is currently limited service out to the north of Cam, however the sites are reasonably accessible from the A38 Bristol Road. As set out in the 2014 IDP, a Dursley Community Responder Scheme should be set up to reduce response times and help to respond to the growth set out in the Cam & Dursley Cluster.

### Police Service

Dursley Police Station is fit-for-purpose and considered by the Constabulary to be suitable for ongoing use. There is capacity at the station for an increase in the number of staff operating from the site, and it may be appropriate to seek a contribution to this given that the proposed strategic development sites at Cam North West and Cam North East would likely result in an **additional demand for six police staff at a cost of up to £250,000.**

### Fire Service

There are no plans to expand, improve or close the existing fire station at Dursley.

## The Gloucester Fringe

### Ambulance Service

The strategic development sites within the Gloucester Fringe are expected to be within the acceptable response time for the ambulance service, served from stations within Gloucester.

### Police Service

The proposed strategic development sites within the Gloucester Fringe would be well-served by the existing services in Gloucester. It is expected that the strategic growth set out in the Local Plan Review at South of Hardwicke, Hunts Grove and Whaddon would result in **an additional demand for 27 police staff at a cost of up to £1.28m.**

## The Berkeley Cluster

### Ambulance Service

Concerns have been raised that both Sharpness Docks and the Sharpness Garden Village would not be reachable by the ambulance service within acceptable time limits. It is recommended that a community ambulance responder scheme is established at one of the sites.

### Police Service

The development of the Sabrina Centre at the former Berkeley Nuclear Power Station does not include a day-to-day policing function, and as a result this part of Stroud District does not have good coverage at present. The Police Point at Berkeley Town Hall has a limited function for policing and is utilised for information and meetings.

<sup>125</sup> Home Office Police Funding Settlement. Available: <https://homeofficemedia.blog.gov.uk/2020/01/22/factsheet-police-funding-settlement-2020-21/>

Whilst there may be an opportunity to improve coverage arising from the development of Sharpness Docks and the Sharpness Garden Village proposals, the Constabulary outlined that there would be no expectation for permanent provision on either site. It is likely that a contribution would be sought to support policing the strategic sites at Sharpness Docks, Sharpness Garden Village and Wisloe Garden Village at **a cost of £980,000, on the basis of the additional demand for 25 police staff.**

## Other Clusters

There are no strategic development sites within the Severn Vale, Wotton, or Cotswold Clusters and as such, it is unlikely that contributions will be sought for improvements to the emergency services to respond to housing growth. The local development sites are within or adjacent to existing settlements and as such, the level of coverage required is likely to be similar, with a slight increase in demand anticipated.

## Sector-specific Funding

The emergency services are funded through a combination of central government grants and council tax revenues.

In 2020/21<sup>125</sup>, the Government has increased the threshold for council tax referendum limit, and it is anticipated that this could increase funding to Police and Crime Commissioners by up to £248m across England and Wales.

The Police Transformation Fund has been replaced by a new National Capability Programme and the Police Now scheme aims to support graduate recruitment and training. Police services can also access special grant funding for unexpected events and major investigation.

Subject to passing the statutory tests for s.106 agreement<sup>126</sup>, of being necessary, directly related and reasonable, contributions are becoming increasingly utilised

<sup>126</sup> MHCLG (2019) Planning obligations. Available: <https://www.gov.uk/guidance/planning-obligations>

to help support improvements to policing associated with development. This must, of course, be balanced against the need to provide other obligations and the need to make development viable.

The main source of income for SWAST is through NHS service level agreements made with the clinical commissioning groups (CCG) across the South West, including Gloucestershire CCG. The Department of Health also provides a capital allocation for training and specialist response.

Gloucestershire Fire and Rescue Service is managed as part of the County Council but receives its funding from council tax precepts and income from the Ministry for Housing, Communities and Local Government (MHCLG).

## Conclusions

Following a number of years of austerity and consolidation of services, the emergency services are able to recruit new officers to help deliver improvements to services and to respond to growth set out in the Local Plan Review.

The rural locations of some of the strategic site allocations present challenges in terms of meeting response times and it may be necessary to provide onsite ambulance points. Generally, coverage in existing settlements elsewhere in the district is good.

It is not expected that there would be an onus on developers providing funding to the emergency services given the reliance on government grants and council tax, however contributions may be sought to provide improvements to policing infrastructure, where they meet the tests for planning obligations.

Developers should however ensure that new developments provide sufficient access for fire tenders and hydrants at suitable locations in consultation with the Fire and Rescue Service.

## 12 Infrastructure Assessment: Utilities

### Responsibility for delivery

This section covers the supply of energy (including electricity and gas) for the proposed developments, the potable water supply and the collection and treatment of wastewater generated. The following organisations are responsible for the utility infrastructure in Stroud.

| Service Provider                               | Responsibility  |
|--|---|
| <b>National Grid</b>                           | National Grid are responsible for the transmission of electricity and gas across the country.   |
| <b>Western Power Distribution (Western PD)</b> | The electricity provider for the Stroud area is Western PD. As a regional Distribution Network Operator (DNO), they are responsible for distributing electricity from National Grid supply points to houses and businesses in the region.   |
| <b>Wales &amp; West Utilities (WU)</b>         | The gas distribution network in Stroud is owned and operated by Wales & West Utilities. Stroud is situated within WU's South West Local Distribution Zone (LDZ).  |
| <b>Severn Trent Water (STW)</b>                | Severn Trent is the potable water provider for Stroud, sitting within their Strategic Grid and Forest & Stroud water resource zones.<br><br>Severn Trent are also the wastewater provider for the majority of the District. Wastewater is collected in private drains which feed into public gravity fed sewers and local pumping stations. Wastewater should be drained as separate foul and surface water runoff, with surface water sustainably discharged where possible. |
| <b>Wessex Water (WW)</b>                       | Wessex Water provide wastewater services to southern parts of the District (including towns of Sharpness, Berkeley and Kingswood).  |
| <b>Renewable Energy</b>                        | Renewable Energy projects are delivered by the private sector, however there are a variety of public and private sector funding mechanisms that can support delivery of new renewable energy infrastructure assets.   |

### Overview of progress since the 2014 IDP

#### Literature, Policy and Strategy Changes

**The Stroud District IDP Refresh (2014):** Based on the 2014 quanta, WPD did not identify any areas where connections could not be provided. At the time the only large-scale reinforcement was for a new 33kV overhead line to Ryeford Bulk Supply Point in order to supply the proposed Sharpness developments, with a 3-4-year lead in period. Additional 11kV circuits were identified as likely required at North East Cam, Stroud Valleys and Hunts Grove, however these are not viewed as significant works.

Wales & West Utilities were unable to provide an estimate of any infrastructure reinforcements at this IDP stage, due to them requiring more detailed information to undertake their assessments.

Severn Trent Water provide wastewater services to the majority of the district. The previous IDP identified potential constraints that may impact the phasing of proposed developments but not prevent their delivery. Capacity upgrades at Coaley and Stanley Sewage Treatment Works were planned to be undertaken in AMP6, with no further capacity issues anticipated. Some upgrades to the sewer networks were identified: local upsizing of pipes at Hunts Grove Extension; capacity improvements for the later phases of West of Stonehouse; and significant works required at Stroud Valleys as there are already sewer flooding issues in Stroud.

Wessex Water provide wastewater services to some southern parts of the district, including Sharpness. Here, they forecast that no capacity improvements to Sharpness Sewage Treatment Works were required before 2020, however improvements to increase the sewer network would be necessary to support the proposed developments.

## Changes since 2014 IDP: Overarching Documents

**National Planning Policy Framework (2019):** The NPPF (paragraph 20) outlines that strategic policies should set out an overall strategy for the pattern, scale and quality of development, and make sufficient provision for water supply, wastewater and energy. Section 14 outlines that the planning system should support the transition to a low carbon future in a changing climate by supporting renewable and low carbon energy. Plans should provide a positive strategy for renewable and low carbon energy, identify suitable areas for these energy sources and identify opportunities for development to draw from decentralised or low carbon energy systems.

**The UK's Draft Integrated National Energy and Climate Plan (NECP) (2019)<sup>127</sup>:** This national strategy sets the plan for the energy sector if the UK was to leave the European Union. It outlines the UK's commitment to reducing emissions and act on climate change whilst growing the economy. It sets out five 'dimensions' to meeting this goal: ensuring there are secure supplies for consumers; improving energy efficiency and energy management and decarbonising nearly all heating and cooling of buildings; develop the internal energy market and; supporting research, innovation and competitiveness. The document sets out a summary of the UK's energy policies, their status and their extent of impact, and outlines how these will be encapsulated and maintained if the UK leaves the EU.

**Gloucestershire Sustainable Energy Strategy (2019):** This document sets out how Gloucestershire can help achieve the Government's aim of a low carbon energy future, whilst providing economic and social benefits to local businesses and residents.

**Western Power Distribution Long Term Development Statement (LTDS) (2019):** This LTDS provides an overview of the distribution network, to assist existing and future users of the network in identifying and assessing opportunities available for new connections. It discusses the network configuration and basic design principles that their network adheres to. Of

particular use are the geographic maps, load data and connection enquiries. The LTDS and its accompanying data is refreshed annually to reflect changes to the electricity network.

**Wales & West Utilities Long Term Development Statement (2019):** This LTDS contains WWU's demand and supply forecasts for their operating area. It also sets out WWU's aspirations to assist in the UK's aim of being carbon neutral by 2050 through balancing the unpredictable nature of wind power generation, supply green gas generation clients, and introduce biomethane and hydrogen to their network.

**Gloucestershire Sustainable Energy Strategy (2019):** This Strategy sets out the current baseline and aims for Gloucestershire, to reduce their overall carbon emissions for its transport, domestic and commercial/industrial sector.

**Severn Trent Water Resources Management Plan (2019):** In this WRMP, Severn Trent's set out their long-term plans for how to accommodate the impacts of population growth, drought, environmental obligations and climate change uncertainties in order to balance the supply and demand of their supply area.

**Stroud Renewable Energy Resources Assessment (2019):** Stroud District Council aims for the district to be carbon neutral by 2030, through a range of: increased energy efficiency; energy demand reduction; heat decarbonisation; growth of electric vehicles; and increasing local renewable energy generation. This report also assesses which energy types have the greatest potential for energy generation and emission reductions within Stroud.

## Assessment of Current Infrastructure Provision

This section reviews the existing utility networks that supply the Stroud District, in order to understand the baseline scenario. This enables the ability of the

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<sup>127</sup>Dept. for Business, Energy & Industrial Strategy (2019) Available: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/774235/national\\_energy\\_and\\_climate\\_plan.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/774235/national_energy_and_climate_plan.pdf)

existing network to support the proposed sites to be assessed in the following section.

## Electricity

National Grid owns and operates the electricity transmission network in England, supplying electricity to local Distribution Network Operators (DNOs). DNOs own, operate and maintain the distribution networks, distributing electricity from the transmission network to customers' premises, on behalf of the electricity supply companies. DNOs charge suppliers for the use of their distribution network.

Stroud is served by Western Power Distribution (PD). As regional DNO, Western PD are required to produce Long Term Development Statements (LTDSs), presenting details of the current and future status of their network.

Western PD receive the electricity from National Grid at Grid Supply Points (Port Ham for Stroud), which step the voltage down to 132kV. These 132kV overhead lines supply Bulk Supply Points which reduce the voltage to 33kV. Most of the network in Stroud is supplied by Ryeford BSP, with the northern area supplied by Castle Meads BSP. This 33kV network then disperses the electricity supply to local Primary substations. Primary substations (33kV to 11kV) generally feed out secondary substations (11kV to Low Voltage) which connect to local homes and commercial premises. The existing 11kV network extends across much of the built-up areas of Stroud.

Individual properties connecting to the network would likely be supplied by the existing LV network, however larger developments will require a larger demand and so connect to a local primary substation to supply their own on-site secondary substations. This may require upgrades to the existing primary substation or upgrades/new 11kV circuit cables in order to supply the new secondary substations. In extreme cases, where developments are particularly large or energy intensive, an additional primary substation may be required, supplied by the 33kV network. These primary substations often pose the biggest utility obstacle to developments, as the triggering of works to upgrade or provide new primary substations can result in high costs to the developer.

Western PD have several primary substations in proximity to the sites within this study:

- Dursley
- Tuffley
- Berkeley
- Ryeford
- Dudbridge
- Netherhills
- Hammerley Down
- Camp

Western PD, like all regional DNOs, operate a first come, first serve basis for electricity capacity provision. This means that a development site may absorb the remaining existing capacity at an electricity substation, requiring the next development to contribute towards an upgrade.

There are a number of existing solar farms in the district, with this power generation connected to the grid network. There are currently areas of the electricity network which are constrained for both electricity generation and/or demand. Coordination with Western PD and National Grid would be required to identify ideal locations for sustainable energy generation in Stroud which could supply the proposed developments, and the potential upgrades required to facilitate this.

## Gas

National Grid owns and operates the high-pressure gas transmission network in England, supplying gas to distribution networks. The distribution network in Stroud is owned and operated by Wales & West Utilities (WWU). Gas enters the local distribution network at high pressure and through a series of pressure



reducers, governors and gasometers and increased mains sizes, the pressure is adjusted for distribution to premises.

WWU’s network has over 35,000km of pipe mains, serving 2.5million customers. This network supplies most neighbourhoods, with only particularly rural networks not served by the existing gas distribution network. Stroud is situated within WWU’s South West Local Distribution Zone (LDZ).

In their LTDS, Wales & West Utilities have modelled and analysed their likely future growth and have forecast an increase in peak demand of 11% over the next 10 years. This is predominantly due to: population increase; gas usage for flexible electricity generation to balance renewable energies; and to support the increase in green gas producers.

### Water

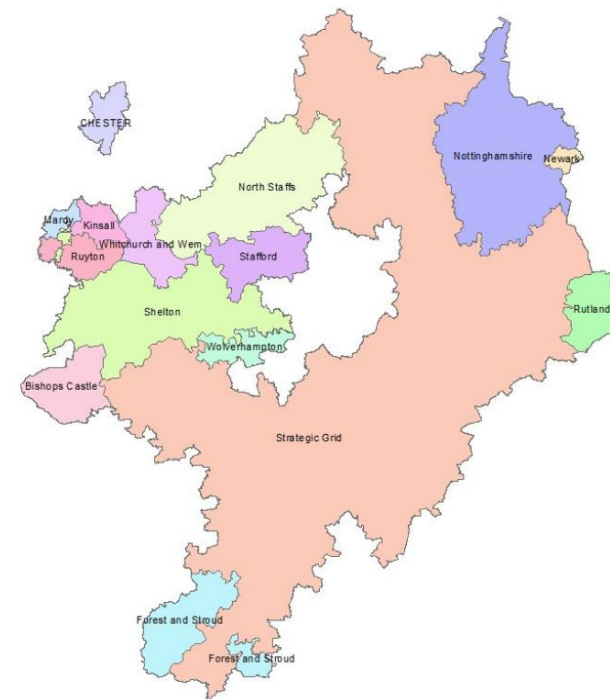
Severn Trent provide a water supply to the District. Stroud is situated across ST’s Forest and Stroud Resource Zone (RZ) and their Strategic Grid RZ.

It is a statutory requirement that water companies produce and publish a Water Resources Management Plan (WRMP). Seven Trent issued their latest WRMP in 2019, where they set out their long-term plans for how to accommodate the impacts of population growth, drought, environmental obligations and climate change uncertainties in order balance the supply and demand of their supply area.

Severn Trent are committed to reducing leakage throughout their network by 15%, which they hope, along with improved water efficiency standards in homes, will reduce the consumption rate in the future. They also hope to increase the use of water meters for customers across the network, to reduce consumption and better understand water demand patterns.

Severn Trent also aim to reduce abstraction from water sources that have a detrimental impact on the environment.

Figure 1 – Severn Trent’s water resource zones (WRMP)



### Wastewater

Severn Trent operate the sewerage network for the majority of Stroud, except for a small southern section of the district which is operated by Wessex Water. within this IDP Wessex Water are the operator for the following sites: Sharpness, Sharpness Docks, Newton & Sharpness, Berkeley and Kingswood.

Wastewater is collected in private drains which feed into public sewers and local pumping stations and is treated at Sewage Treatment Works (STW). Although traditionally treated as a combined foul and surface water system, modern developments are required to dispose of surface water sustainably, with an aim for only foul water to enter the wastewater network.

It should be noted that Severn Trent and Wessex Water have a statutory duty to serve new developments under the Water Industry Act 1991 for wastewater.



## Planned Provision and Scheme Identification based on revised Housing and Employment Needs

### Overview and Assumptions

The distribution of growth set out within the Local Plan Review will have an impact on the existing utility infrastructure in the region. In order to identify potential future shortfalls in the utility networks, an assessment has been made on the expected utility demands against the capacity within the networks. The demands have been estimated by Arup based on the distribution of growth set out in the Draft Plan and utility unit demands based upon previous Arup projects and professional judgement. The capacities of the networks have been determined from information provided by the utility providers in the area. Note that this is a high-level assessment to inform likely upgrade requirements and should not be used for specific site connection applications, due to the variable factors which may influence a sites individual demand - particularly for the smaller developments.

Several assumptions have been made which influence the calculated utility demands:

- Urban developments (>1000 houses) will have heating split between gas and electricity (70% and 30% respectively), with apartments typically being electrically heated.
- Small/rural developments (<1000 houses) will have traditional gas heating.
- 40% of employment gross site area is net developable area<sup>128</sup>.
- Employment split: 27% offices, 55% general industrial, 18% warehouses<sup>129</sup>.

<sup>128</sup> Table 47. Labour Demand Modelling Assumptions from Gloucestershire Economic Needs Assessment (March 2020, SPRU)

The capacity of the existing utility infrastructure has been determined from the DNOs published information and supplemented with consultation where possible. However, engagement with the DNOs must continue as sites are brought forward, and the extent of potential reinforcement requirements will not be fully confirmed until individual connection applications are submitted.

No energy projects of sufficient scale to be classed as Nationally Significant Infrastructure Projects have been identified within Stroud. In September 2020, Hitachi formally announced its withdrawal from the Oldbury New Nuclear project and as such, the proposal is on hold indefinitely. This project in South Gloucestershire could have implications on the south-west of Stroud District if it were to come forward in the future.

### Electricity

#### Overview

An estimate of the electrical power demands has been made for the proposed development sites. Diversification between various land uses has been applied, as the peak demand will not occur simultaneously in every property of the same land use type. Diversification between various land use types has also been applied, as their peak demand would not occur at once. For example, the maximum peak residential demand occurs on a winters evening when the most appliances are in use, whilst the maximum peak demand for an air-conditioned office would typically occur on a warm summer afternoon. The electrical demand for these scenarios is provided in Table 55

Table 55 Proposed Electricity Demands

| Location                | Electricity (MVA) | Diversified Electricity: Summer Afternoon (MVA) | Diversified Electricity: Winter Evening (MVA) |
|-------------------------|-------------------|---|---|
| Large site commitments* | 11.3              | 4.5   | 11.3  |

<sup>129</sup> Table 69. Comparison of Employment Land Scenarios by Local Authority, 2021-41 (Stroud 2020-40) from Gloucestershire Economic Needs Assessment (March 2020, SPRU)

| Location                 | Electricity (MVA) | Diversified Electricity: Summer Afternoon (MVA) | Diversified Electricity: Winter Evening (MVA) |
|--------------------------|-------------------|---|---|
| Small site commitments*  | 0.7               | 0.3   | 0.7   |
| Cam North West           | 1.2               | 0.5   | 1.2   |
| Cam North East Extension | 0.3               | 0.1   | 0.3   |
| South of Hardwicke       | 2.8               | 1.1   | 2.8   |
| Hunts Grove Extension    | 1.2               | 0.5   | 1.2   |
| Sharpness Docks          | 2.1               | 1.8   | 1.8   |
| Sharpness                | 8.0               | 4.6   | 7.5   |
| Stonehouse North West    | 2.2               | 1.6   | 2.0   |
| Wisloe                   | 4.7               | 2.6   | 4.4   |
| Berkeley                 | 0.2               | 0.1   | 0.2   |
| Brimscombe & Thrupp      | 0.3               | 0.1   | 0.3   |
| Cam                      | <0.1              | <0.1  | <0.1  |
| Dursley                  | <0.1              | <0.1  | <0.1  |
| Frampton-on-Severn       | <0.1              | <0.1  | <0.1  |
| Kingswood                | 0.1               | <0.1  | 0.1   |
| Leonard Stanley          | 0.1               | <0.1  | 0.1   |
| Minchinhampton           | 0.1               | 0.1   | 0.1   |
| Nailsworth               | 0.2               | 0.1   | 0.2   |
| Newtown & Sharpness      | 0.1               | <0.1  | 0.1   |
| Painswick                | <0.1              | <0.1  | <0.1  |
| Stonehouse               | <0.1              | <0.1  | <0.1  |
| Stroud                   | 0.4               | 0.2   | 0.4   |
| Whitminster              | 0.1               | <0.1  | 0.1   |
| Small sites windfall     | 2.2               | 0.9   | 2.2   |
| Whaddon                  | 5.9               | 2.4   | 5.9   |
| Javelin Park             | 2.1               | 2.1   | 1.7   |

| Location                     | Electricity (MVA) | Diversified Electricity: Summer Afternoon (MVA) | Diversified Electricity: Winter Evening (MVA) |
|------------------------------|-------------------|---|---|
| Quedgeley East Extension     | 1.2               | 1.2   | 0.9   |
| Renishaw New Mills           | 2.4               | 2.3   | 1.8   |
| Stonehouse Eco Park (M5 J13) | 2.4               | 2.3   | 1.8   |
| <b>Total (excluding *)</b>   | <b>45.7</b>       | <b>26.7</b>                                     | <b>42.6</b>                                   |

\* these site commitments from the previous IDP have already gained planning permission and will likely already be accounted for in utility providers forecasts. They are included here for completeness.

It should be noted that the electricity demand of the particularly small developments (<50 homes) is less than 0.1MVA. However, this high-level assessment reviews the cumulative impact that multiple developments in an area will have on the existing electricity network.

**Substation Capacity Assessment:**

Table 56 sets out the electrical demands for the developments and which substation these will likely be supplied by, based on Western PD’s network capacity maps<sup>130</sup>. Developments are typically served by their nearest primary substation, depending on the configuration of the existing 11kV network. An assessment of the local 11kV network has not been undertaken at this stage to confirm this.

For each substation, the greater diversified electricity demand has been taken as the peak connection requirement.

The results show that at a local level, there are some issues where the existing primary substations do not have sufficient available capacity to supply the surrounding proposed developments. Incidents where the proposed demand is greater than the available capacity are highlighted in red in Table 56.

Table 56 Substation Capacities

<sup>130</sup> <https://www.westernpower.co.uk/our-network/network-capacity-map-application>

| Site                     | Diversified Elec - summer afternoon | Diversified Elec - winter evening | Peak Elec Demand (MVA) | Primary Sub | Head room (MV A) | Surplus / Shortfall (MVA) |
|--------------------------|-------------------------------------|-----------------------------------|------------------------|-------------|------------------|---------------------------|
| Cam North West           | 0.5                                 | 1.2                               | 5.9                    | Dursley     | 9.0              | 3.1                       |
| Cam North East Extension | 0.1                                 | 0.3                               |                        |             |                  |                           |
| Cam                      | <0.1                                | <0.1                              |                        |             |                  |                           |
| Wisloe                   | 2.6                                 | 4.4                               |                        |             |                  |                           |
| Dursley                  | <0.1                                | <0.1                              |                        |             |                  |                           |
| South of Hardwicke       | 1.1                                 | 2.8                               | 10.8                   | Tuffley     | 8.4              | -2.4                      |
| Hunts Grove Extension    | 0.5                                 | 1.2                               |                        |             |                  |                           |
| Whaddon                  | 2.4                                 | 5.9                               |                        |             |                  |                           |
| Quedgeley East Extension | 1.2                                 | 0.9                               |                        |             |                  |                           |
| Sharpness Docks          | 1.8                                 | 1.8                               |                        |             |                  |                           |
| Sharpness                | 4.6                                 | 7.5                               | 9.9                    | Berkeley    | 8.8              | -1.1                      |
| Berkeley                 | 0.1                                 | 0.2                               |                        |             |                  |                           |
| Brimscombe & Thrupp      | 0.1                                 | 0.3                               |                        |             |                  |                           |
| Newtown & Sharpness      | <0.1                                | 0.1                               |                        |             |                  |                           |
| Stonehouse North West    | 1.6                                 | 2.0                               |                        |             |                  |                           |
| Leonard Stanley          | <0.1                                | 0.1                               | 2.1                    | Ryeford     | 25.6             | 23.6                      |

| Site                         | Diversified Elec - summer afternoon | Diversified Elec - winter evening | Peak Elec Demand (MVA) | Primary Sub    | Head room (MV A) | Surplus / Shortfall (MVA) |
|------------------------------|-------------------------------------|-----------------------------------|------------------------|----------------|------------------|---------------------------|
| Stonehouse                   | <0.1                                | <0.1                              | 3.6                    | Netherhills    | 8.8              | 5.2                       |
| Frampton-on-Severn           | <0.1                                | <0.1                              |                        |                |                  |                           |
| Whitminster                  | <0.1                                | 0.1                               |                        |                |                  |                           |
| Javelin Park                 | 2.1                                 | 1.7                               |                        |                |                  |                           |
| Stonehouse Eco Park (M5 J13) | 2.3                                 | 1.8                               |                        |                |                  |                           |
| Kingswood                    | <0.1                                | 0.1                               | 2.4                    | Hammerley Down | 10.4             | 8.0                       |
| Renishaw New Mills           | 2.3                                 | 1.8                               |                        |                |                  |                           |
| Minchinhampton               | 0.1                                 | 0.1                               | 0.7                    | Dudbridge      | 9.5              | 8.8                       |
| Nailsworth                   | 0.1                                 | 0.2                               |                        |                |                  |                           |
| Stroud                       | 0.2                                 | 0.4                               |                        |                |                  |                           |
| Painswick                    | <0.1                                | <0.1                              | 0.03                   | Camp           | 0.57             | 0.54                      |

### Stroud Valleys

Minchinhampton, Nailsworth and Stroud have a combined peak demand of 0.7MVA. These developments would be supplied by Dudbridge primary substation which currently has sufficient headroom, meaning that significant upgrades are unlikely.

Brimscombe & Thrupp would be supplied by Berkeley primary substation, with a small peak demand (0.3MVA) that is likely to be met. However, other

development sites in the Berkeley Cluster would also be supplied by this substation, and there is not sufficient headroom for this total combined demand.

### The Stonehouse Cluster

Stonehouse, Stonehouse North West and Leonard Stanley (combined peak demand of 2.1MVA) would be supplied by Ryeford primary substation. This substation has a large available capacity and so there are no significant reinforcement requirements expected to support these developments.

Stonehouse Eco Park is within Netherhills primary substation's catchment, along with the Severn Vale sites.

### Cam & Dursley

Cam North West, Cam North East Extension, Cam and Dursley (1.5MVA) would be supplied by Dursley primary substation. This substation currently has sufficient headroom to support the proposed developments (and that at Wisloe) without significant upgrades.

### The Gloucester Fringe

South of Hardwicke, Hunts Grove Extension, Whaddon and Quedgeley East Extension have a combined demand of approximately 5MVA. These sites would be supplied by Tuffley primary substation, however there is not sufficient headroom for both the Gloucester Fringe developments and the development on the Land at Whaddon (2.4MVA shortfall).

The initial developments, such as Hunts Grove Extension, can utilise the remaining headroom at Tuffley primary substation.

Liaison with Western Power Distribution (WPD) has confirmed that they are aware of potential capacity constraints at Tuffley primary. This is predominantly due to the proposed expansion of Gloucester City southwards, with this additional demand forecast to trigger reinforcement requirements between 2026-2030. WPD have a long-term strategy for creating further demand headroom in this part of the city, likely through the establishment of a new primary substation. They noted that there isn't sufficient justification for the

reinforcement yet, and so ongoing engagement with WPD is recommended for the developers of these sites.

Javelin Park would likely be served by Netherhills primary substation, along with the Severn Vale development sites.

### The Berkeley Cluster

The proposed Wisloe development has a peak demand of 4.4MVA. This site would be supplied by Dursley primary substation, which currently has sufficient headroom, meaning that significant upgrades to this substation are not likely to be necessary.

Sharpness Docks, Sharpness, Berkeley and Newtown & Sharpness have a combined peak demand of 9.6MVA. Berkeley primary substation which would supply these sites (and Brimscombe & Thrupp 0.3MVA) does not have sufficient capacity. There is a forecast shortfall of 1.1MVA at this substation for all of these developments. This shortfall is equivalent to approximately 500 homes or 6ha of employment land use.

It is likely that Sharpness Docks, Berkeley, Newtown & Sharpness and the initial Sharpness plots will be able to be supported by the remaining available capacity Berkeley primary substation. Based on the provided housing trajectory, it is likely that upgrades will be required by 2037 to support the later plots at Sharpness. WPD have stated that capacity upgrades to Berkeley primary would require reinforcement of the existing 33kV overhead lines (OHLs) which supply this substation, but do not expect these works to be onerous. Whilst there are no reinforcements currently planned for Berkeley primary, WPD noted that these would be considered in more detail in the future, once the demand nears the capacity of the substation.

### The Severn Vale

Whitminster, Frampton-on-Severn, Javelin Park and Stonehouse Eco Park have a combined peak demand of 3.6MVA. These sites would be supplied by Netherhills primary substation. This substation has 8.8MVA available capacity which is more than sufficient to meet increased demand associated with growth.

In their LTDS, WPD have forecast that the headroom available at Netherhill primary may reduce to 7.2MVA by 2024. Alternative renewable energy schemes could be investigated to reduce the peak electricity demand from the grid, such as district heating (fuelled by a biomass boiler or other low-carbon technology) or off-grid electricity production.

### The Wotton Cluster

Kingswood and Renishaw New Mills have a combined peak demand of 2.4MVA. These sites would be served by Hammerley Down primary substation, which currently has sufficient headroom to support the proposed developments without significant upgrades.

### The Cotswold Cluster

Painswick would be supplied by Camp primary substation. This substation only has a small available capacity, however as the proposed development only requires a small peak demand (<0.1MVA), it is likely that this can be provided without any significant upgrades.

### Connection offers and budget estimates

It should be noted that as DNOs operate on a first come first served policy, and supplies cannot be reserved, there may be additional developments not accounted for in this IDP which use this available capacity before these IDP developments are brought forward. Western PD identifies several connection interests in their LTDS which if accepted and go live, would reduce the available capacity at a substation:

- A budget estimate has been provided for a 3MVA generation connection to Dursley primary substation.
- Two budget estimates have been provided for 33kV connections to Tuffley primary substation, totalling 18MVA. This increased demand may however be balanced by the two budget estimates provided for 18MVA power generation connections.
- Three connection offers have been accepted for a total demand of 7.9MVA at Tuffley primary substation. If these were to go live, they would utilise most of the remaining headroom, with the proposed strategic sites triggering further reinforcements. Further investigation work is required to confirm with the proposed developers that these are not their sites, with applications already submitted.
- Three connection offers have been made but Not Accepted, for a total demand of 10.5MVA at Berkeley primary substation. This is not currently sufficient capacity for all of this demand, without upgrades.
- A budget estimate for a 5MVA connection has also been provided for Berkeley primary, and four generation budget estimates totalling 12MVA.
- A budget estimate has been provided for a 5MVA generation connection to Ryeford primary substation.
- A connection offer has been accepted for a total demand of 1MVA at Ryeford primary substation. As this primary substation has a large headroom, this additional connection should not pose a risk to the feasibility of the proposed strategic sites aiming to connect to this substation.
- Two budget estimates have been provided for a total generation connection of 6MVA to Netherhills primary substation.
- Two budget estimates have been provided for 33kV connections with a total demand of 25MVA to Hammerley Down primary substation, and four budget estimates for generation 33kV connections totalling 51MVA.
- A further seven 11kV connections to Hammerley Down primary substation have had budget estimates provided, with a totalling 35.5MVA.
- Five budget estimates have been provided for a total generation connection of 28.2MVA to Dudbridge primary substation.
- Two connection offers have been accepted for a total demand of 7MVA at Dudbridge primary substation. If these were to go live, they would utilise a large proportion of the remaining headroom at this substation, however as

the proposed strategic sites only require a small demand to be supplied by this primary, it is likely that they could still be accommodated.

These connection applications demonstrate that it is vital for sites to engage early with WPD to assess the likely costs associated with their connection and to submit their application at the correct time. This is particularly vital for the sites due to be occupied within the next 10 years, to ensure that any abnormal costs associated with large network upgrades are accounted for in cost plans and viability assessments of strategic sites.

### District-wide requirements

It is possible for development sites to be have an independent private electrical supply through sustainable sources such solar PV. This could reduce the overall peak demand a site has on the grid, which is particularly beneficial when there are primary substation capacity constraints that may have significant associated costs for the developer. Typically, the resilience to the loss of electricity supply is lower than loss of heating supply, as this has a greater impact on homes/businesses – therefore a backup electricity connection supply is still preferential.

In the pursuit of sustainable energy, obtained through relying on grid decarbonisation, residential developments in the future may be electrically heated. Based on current building efficiency, this would result in an increased demand of approximately 37MVA, which is highly unlikely to be able to be accommodated by the existing electricity network without requiring significant upgrades. Therefore, it is recommended that local opportunities to decarbonise are fully utilised to reduce demand on the grid. Including looking to increase the efficiency of properties to reduce demands and localised power generation.

The introduction of Electric Vehicle (EV) charging points will also increase the electricity demand for developments. The introduction of approximately 300 EV charging points overnight (or full day) charging points would increase the demands by 1MVA.

It is often cost prohibitive for a scheme to divert strategic infrastructure, such as 132kV overhead lines. Instead, these assets should be retained, and their easements incorporated into the masterplan, utilising this space as road corridors

and parks. This should be considered on a site by site basis, depending on the type of infrastructure assets and the development sites requirements. It is recommended that each developer obtains the statutory utilities plans to inform their design.

Avison Young, on behalf of National Grid, have stated that based on the Draft Local Plan (2019) they have no concerns regarding the ability for their electricity transmission infrastructure to accommodate the electricity demand for the proposed sites.

### Gas

An estimate of the likely gas demands for each development site has been made:

Table 57 Estimated likely gas demands per strategic development site

| Location                 | Gas Demand (MW) |
|--------------------------|-----------------|
| Large site commitments*  | 12.3            |
| Small site commitments*  | 1.5             |
| Cam North West           | 2.6             |
| Cam North East Extension | 0.7             |
| South of Hardwicke       | 3.1             |
| Hunts Grove Extension    | 2.7             |
| Sharpness Docks          | 3.4             |
| Sharpness                | 9.5             |
| Stonehouse North West    | 4.0             |
| Wisloe                   | 5.5             |
| Berkeley                 | 0.4             |
| Brimscombe & Thrupp      | 0.7             |
| Cam                      | 0.1             |
| Dursley                  | 0.0             |
| Frampton-on-Severn       | 0.1             |
| Kingswood                | 0.2             |
| Leonard Stanley          | 0.1             |

| Location                     | Gas Demand (MW) |
|------------------------------|-----------------|
| Minchinhampton               | 0.3             |
| Nailsworth                   | 0.4             |
| Newtown & Sharpness          | 0.3             |
| Painswick                    | 0.1             |
| Stonehouse                   | 0.0             |
| Stroud                       | 1.0             |
| Whitminster                  | 0.1             |
| Small sites windfall         | 4.9             |
| Whaddon                      | 6.4             |
| Javelin Park                 | 3.0             |
| Quedgeley East Extension     | 1.7             |
| Renishaw New Mills           | 3.3             |
| Stonehouse Eco Park (M5 J13) | 3.3             |
| <b>Total (excluding *)</b>   | <b>58</b>       |

\* these site commitments from the previous IDP have already gained planning permission and will likely already be accounted for in utility providers forecasts. Included here for completeness.

Avison Young, on behalf of National Grid, have stated that based on the Draft Local Plan (2019) they have no concerns regarding the ability for their high-pressure gas transmission infrastructure to accommodate the gas demand for the proposed sites.

As noted in the 2014 IDP, Wales & West Utilities (WWU) require more detailed information on individual sites (such as masterplan layout) before they are able to analyse their network model and provide formal feedback on capacity and constraints. There is ongoing consultation to understand any significant constraints in supplying proposed strategic sites.

However, under the Gas Act 1986, WWU have an obligation to develop and maintain an efficient and economical network and comply with any reasonable

requests to connect new customers. It should be noted that new connections to some rural locations may be uneconomical, and so the proximity of the development sites to the existing distribution network should be confirmed in order to confirm the feasibility of a gas connection. It is recommended that developers contact WWU on a site by site basis to confirm the proximity of the existing gas network and its capacity.

It is often cost prohibitive for a scheme to divert strategic infrastructure, such as the high-pressure gas main at Hardwicke and Wisloe. Instead, these assets should be retained, and their easements incorporated into the masterplan, utilising this space within the green infrastructure framework for sites. This should be considered on a site by site basis, depending on the type of infrastructure assets and the development sites requirements. It is recommended that each developer obtains the statutory utilities plans to inform their design.

In the 2018 Long Term Development Statement, WWU have modelled and analysed their likely future growth, and have forecast an increase in peak demand of 11% over the next 10 years.

WWU have 19 biomethane sites which deliver green gas into their network, with a further seven in the pipeline. These could have the ability to provide heat to 175,000 homes with traditional heating systems or approximately a million hybrids. This, and the introduction of hydrogen, demonstrates that it may be possible to meet the sustainable aspirations of a site through gas grid decarbonisation, and offsetting any additional carbon.

## Renewable Energy

The UK has a target to have net zero greenhouse gas emissions by 2050. Net zero means that any emissions are balanced by schemes to offset an equivalent amount of greenhouse gases from the atmosphere. Nationwide there must be a shift towards renewable energy sources, at both grid level and local scale.



According to the Gloucestershire Sustainable Energy Strategy<sup>131</sup>, the County currently meets approximately 85% of its energy needs from fossil fuels. There has been some progress, with a 27% reduction in CO<sub>2</sub> emissions since 2005, with electricity demand reducing by 9% and gas consumption by 20%.

However, new developments are not currently being designed and built to zero carbon standards. If the 60,000 new homes planned for Gloucestershire are built to existing standards, then the county’s carbon emissions will increase by 3.4%. This highlights the need for the proposed sites to incorporate improved building energy performance, to ensure no increase in carbon emissions. The Strategy proposes that Gloucestershire should aim to reduce carbon emissions by 60% by 2030, meaning that even the initial development sites must incorporate more sustainable infrastructure.

The Strategy aims to increase renewable energy generation within the County, which could either feed into the grid or provide private energy supplies to the proposed developments. Within Stroud ground-mounted solar PV, wind, heat pumps and energy crops have the greatest annual energy supply potential<sup>132</sup>. Regarding on-site options for residential and smaller developments, rooftop solar PV, rooftop solar water heating and heat pumps have good potential and should be investigated by all developers.

Stroud District Council has even more aspirational targets, with an aim for the district to be carbon neutral by 2030, through a range of: increased energy efficiency; energy demand reduction; heat decarbonisation; growth of electric vehicles; and increasing local renewable energy generation. The Stroud District Renewable Energy Resource Assessment notes that specific opportunities for renewable or low carbon energy generation should be considered at the masterplanning stage for the sites within the Draft Local Plan, drawing on advantages of scale, location and early stage design flexibility specific to each site/locality. A range of policy options are currently being considered by the Council, which may dictate requirements such as a minimum percentage renewable energy usage by developments or carbon offsetting of construction.

<sup>131</sup> Gloucestershire Sustainable Energy Strategy – January 2019

Decarbonising heat energy is also key to meeting these targets, either through the introduction of hydrogen to the existing gas networks, transitioning to more (renewable) electric heating or heat pumps. Sustainable energy scenarios for heat should be considered on a site by site basis, depending on land use, population density, building types, natural resources etc.

As sustainable energy strategies are currently less reliable than a grid supply, it is common for a back-up connection to the grid to still be provided, particularly for electricity power where resilience to outages is lower than for heat.

## Water

According to their Water Resources Management Plan (WRMP), Severn Trent have recorded over the last 25 years a long-term downward trend of water supply, despite regional population growth - due to a reduction in leakages and reduced water consumption through a water efficiency programme. Severn Trent are continuing to accommodate additional new customers, through management of their network. It is unlikely that at a strategic level there will be potable water constraints for the proposed developments. The WRMP forecasts that Severn Trent will meet the needs of a predicted population increase of 1.13 million over the next 25 years.

The specific ability for Severn Trent to provide a supply to a site is dependent on the site’s demand, land use, proximity to the existing network and the currently capacity of the local network. Severn Trent have to undertake a detailed network model analysis to understand specific site requirements. This should be undertaken on a site by site basis once a masterplan has been developed.

Table 58 Likely water and sewerage demands per development site

| Location                | Water Demand (m <sup>3</sup> /day) | Foul Generation (m <sup>3</sup> /day) |
|-------------------------|------------------------------------|---------------------------------------|
| Large site commitments* | 1385                               | 1315                                  |
| Small site commitments* | 120                                | 114                                   |

<sup>132</sup> Stroud District Renewable Energy Resource Assessment – November 2019

| Location                 | Water Demand (m <sup>3</sup> /day) | Foul Generation (m <sup>3</sup> /day) |
|--------------------------|------------------------------------|---------------------------------------|
| Cam North West           | 202                                | 192                                   |
| Cam North East Extension | 52                                 | 49                                    |
| South of Hardwicke       | 346                                | 328                                   |
| Hunts Grove Extension    | 216                                | 205                                   |
| Sharpness Docks          | 109                                | 104                                   |
| Sharpness                | 724                                | 687                                   |
| Stonehouse North West    | 203                                | 193                                   |
| Wisloe                   | 448                                | 426                                   |
| Berkeley                 | 35                                 | 33                                    |
| Brimscombe & Thrupp      | 55                                 | 52                                    |
| Cam                      | 4                                  | 4                                     |
| Dursley                  | 3                                  | 3                                     |
| Frampton-on-Severn       | 9                                  | 8                                     |
| Kingswood                | 14                                 | 14                                    |
| Leonard Stanley          | 12                                 | 11                                    |
| Minchinhampton           | 23                                 | 22                                    |
| Nailsworth               | 30                                 | 29                                    |
| Newtown & Sharpness      | 20                                 | 19                                    |
| Painswick                | 6                                  | 5                                     |
| Stonehouse               | 3                                  | 3                                     |
| Stroud                   | 76                                 | 73                                    |
| Whitminster              | 12                                 | 11                                    |
| Small sites windfall     | 389                                | 369                                   |
| Whaddon                  | 720                                | 684                                   |
| Javelin Park             | 29                                 | 28                                    |
| Quedgeley East Extension | 16                                 | 15                                    |

| Location                     | Water Demand (m <sup>3</sup> /day) | Foul Generation (m <sup>3</sup> /day) |
|------------------------------|------------------------------------|---------------------------------------|
| Renishaw New Mills           | 32                                 | 31                                    |
| Stonehouse Eco Park (M5 J13) | 32                                 | 31                                    |
| <b>Total (excluding *)</b>   | <b>3819</b>                        | <b>3627</b>                           |

\* these site commitments from the previous IDP have already gained planning permission and will likely already be accounted for in utility providers' forecasts. Included here for completeness.

### Wastewater

Foul and surface water discharges from developments should be drained separately in independent drainage networks. This is to allow for the sustainable disposal of surface water in line with NPPFs drainage hierarchy<sup>133</sup>, and to avoid the overloading of the wastewater network. Brownfield sites should provide surface water betterment from the existing situation, and greenfield sites should aim to restrict flows to mimic their greenfield runoff. Sites should aim to discharge surface water as high up the hierarchy as possible:

1. infiltration to the ground;
2. to a surface water body;
3. to a surface water sewer;
4. to a combined sewer.

Severn Trent request that all developments on previously developed land shall undertake a surface water outfall assessment to determine if there are any viable alternatives to the existing connection to the combined sewer network. The assessment of alternative surface water outfalls should be proportionate to the scale of the development and any existing flood risk in the area.

Severn Trent have commented on the likely surface water outfalls, noting the proximity of the site to watercourses and existing surface water sewers. Where a

<sup>133</sup> <https://www.gov.uk/guidance/flood-risk-and-coastal-change#flood-risk-opportunities>

site is not in the vicinity of these, and infiltration may not be possible, it may be preferred by the developer to connect to the nearest combined sewer. However, Severn Trent have flagged that this poses a high risk to their network if surface water is discharged to the foul sewer network, as it may overload the existing infrastructure. These high-risk surface water sites are: Minchinhampton, Nailsworth, Stonehouse North West, Cam North West, Hunts Grove Extension, Quedgeley East Extension, Stonehouse Eco Park (M5 J13) and the Land at Wisloe. Developers should undertake BRE365 investigative tests to better understand the permeability of the ground within a site, to determine the feasibility of infiltrating surface water. Additional costs may be incurred by the developer where extensive drainage networks are required to discharge a surface water to the nearest watercourse/surface water sewer, which is not in proximity to the site, should Severn Trent object to this discharging to their foul network.

Flooding and pollution incidents that occur downstream of the proposed site along the network to the Sewage Treatment Works (STW), indicates that there may be capacity issues within the network. Depending on the size of the development, the proposed flows could worsen these constraints. Also, existing pumping stations within the network may not have sufficient capacity to receive the increased flows, without requiring upgrades. Detailed modelling by Severn Trent and or Wessex Water is necessary in the future, to assess the scope of any capacity improvements required to support an individual site, and their cumulative impact. It is recommended that developers contact Severn Trent and or Wessex Water when developing their masterplans, particularly those sites which have been noted as medium/high risk.

A summary of Severn Trent and Wessex Water’s review of the impact of the proposed development site’s foul flows on their wastewater infrastructure is provided below. Typically, sites can be classed as:

- High risk - existing capacity is not available and providing new capacity will involve Environment Agency consent review and/or construction outside of the existing STW boundary.

- Medium risk - existing capacity is not available and providing new capacity will involve construction inside of the existing STW boundary.
- Low risk – existing capacity available.

### Stroud Valleys

Table 59 Stroud Valleys wastewater infrastructure risks

| Location            | Ref  | STW                                | Pollution Incidents | Flooding Incidents | Risk   | Comments                                      |
|---------------------|------|------------------------------------|---------------------|--------------------|--------|---|
| Brimscombe & Thrupp | PS01 | Stanley Downton STW (Severn Trent) | 11                  | 6                  | Low    | Downstream CSO <sup>134</sup> may be affected |
|                     | PS02 |                                    | 11                  | 6                  | Medium |   |
| Minchinhampton      | PS05 |                                    | 10                  | 7                  | Medium |   |
| Nailsworth          | PS06 |                                    | 8                   | 4                  | Medium |   |
|                     | PS07 |                                    | 8                   | 4                  | Low    |   |
| Stroud              | PS10 |                                    | 15                  | 10                 | Medium |   |
|                     | PS11 |                                    | 15                  | 9                  | Low    |   |
|                     | PS12 |                                    | 14                  | 10                 | Low    |   |
|                     | PS13 |                                    | 9                   | 8                  | Medium | CSO within site may be affected.              |

Severn Trent noted that there is an existing sewer capacity improvement scheme in place for Stroud and that the scheme has been made aware of the planned growth outlined in the Draft Local Plan to ensure that where appropriate, and sufficient confidence is available, that these developments are taken into consideration for this scheme. Therefore, any changes/withdrawal of these sites should be conveyed to Severn Trent to reflect in their scheme.

### The Stonehouse Cluster

Table 60 Stonehouse cluster wastewater infrastructure risks

| Location        | Ref  | STW | Pollution Incidents | Flooding Incidents | Risk | Comments |
|-----------------|------|-----|---------------------|--------------------|------|----------|
| Leonard Stanley | PS16 |     | 1                   | 0                  | Low  |          |

<sup>134</sup> Combined sewer overflow.

|                       |       |                                    |   |   |        |   |
|-----------------------|-------|------------------------------------|---|---|--------|---|
| Stonehouse            | PS17  | Stanley Downton STW (Severn Trent) | 0 | 0 | Low    |   |
| Stonehouse North West | PS19a |                                    | 0 | 4 | High   | Stroudwater pumping station (PS) likely to require upgrades.                          |
|                       | PS19b |                                    | 0 | 0 | Medium | Impact on Stroudwater PS performance.   |
| Stonehouse Eco Park   | PS20a |                                    | 0 | 4 | High   | Site not in proximity to existing network. Stroudwater PS likely to require upgrades. |

Severn Trent noted that there is an existing sewer capacity improvement scheme in place for Stonehouse and that the scheme has been made aware of the planned growth outlined in the Draft Local Plan to ensure that where appropriate, and sufficient confidence is available, that these developments are taken into consideration for this scheme. Therefore, any changes/withdrawal of these sites should be conveyed to Severn Trent to reflect in their scheme.

### Cam & Dursley

Table 61 Cam & Dursley cluster wastewater infrastructure risks

| Location                 | Ref  | STW                       | Pollution Incidents | Flooding Incidents | Risk   | Comments                        |
|--------------------------|------|---------------------------|---------------------|--------------------|--------|---------------------------------|
| Cam                      | PS21 | Coaley STW (Severn Trent) |                     |                    | Low    |                                 |
| Cam North West           | PS24 |                           | 2                   | 2                  | High   | Downstream CSO may be affected. |
| Cam North East Extension | PS25 |                           | 3                   | 2                  | Medium |                                 |
| Dursley                  | PS28 |                           | n/a                 | n/a                | Low    |                                 |

Severn Trent noted that there is an existing sewer capacity improvement scheme in place for Cam and that the scheme has been made aware of the planned growth outlined in the Draft Local Plan to ensure that where appropriate, and

sufficient confidence is available, that these developments are taken into consideration for this scheme. Therefore, any changes/withdrawal of these sites should be conveyed to Severn Trent to reflect in their scheme.

### The Gloucester Fringe

Table 62 Gloucester Fringe wastewater infrastructure risks

| Location                 | Ref  | STW                           | Pollution Incidents | Flooding Incidents | Risk   | Comments   |
|--------------------------|------|-------------------------------|---------------------|--------------------|--------|--|
| Hunts Grove Extension    | PS30 | Netheridge STW (Severn Trent) | 0                   | 3                  | Medium | Ongoing growth scheme in Hardwicke may be affected.  |
| Quedgeley East Extension | PS32 |                               | 0                   | 3                  | High   | Pumping Station likely to require upgrades. Ongoing growth scheme in Hardwicke may be affected.                              |
| South of Hardwicke       | G1   |                               | 0                   | 1                  | High   | Local sewer network upgrades likely required due to size of development. Ongoing growth scheme in Hardwicke may be affected. |
| Land at Whaddon          | G2   |                               | 4                   | 4                  | High   | Local sewer network upgrades likely required due to size of development. Not currently planned for in existing south         |

| Location     | Ref  | STW | Pollution Incidents | Flooding Incidents | Risk   | Comments                                    |
|--------------|------|-----|---------------------|--------------------|--------|---|
|              |      |     |                     |                    |        | Gloucester growth scheme.                   |
| Javelin Park | PS44 |     | n/a                 | n/a                | Medium | Downstream pumping station may be affected. |

Severn Trent noted that there is an existing sewer capacity improvement scheme in place for South of Gloucester and that the scheme has been made aware of the planned growth outlined in the Draft Local Plan to ensure that where appropriate, and sufficient confidence is available, that these developments are taken into consideration for this scheme. Therefore, any changes/withdrawal of these sites should be conveyed to Severn Trent to reflect in their scheme.

### The Berkeley Cluster

Table 63 Berkeley Cluster wastewater infrastructure risks

| Location            | Ref  | STW                          | Pollution Incidents | Flooding Incidents | Risk | Comments   |
|---------------------|------|------------------------------|---------------------|--------------------|------|--|
| Berkeley            | PS33 | Sharpness STW (Wessex Water) | n/a                 | n/a                | Low  | Downstream pumping station may be affected.                                    |
| Sharpness Docks     | PS34 |                              | n/a                 | n/a                | Low  | Site not in proximity to existing network.                                     |
| Newtown & Sharpness | PS35 |                              | n/a                 | n/a                | Low  | Downstream pumping station may be affected.                                    |
| Sharpness           | PS36 |                              | n/a                 | n/a                | High | Site to be pumped directly to adjacent STW.                                    |
| Land at Wisloe      | PS37 | Coaley STW (Severn Trent)    | n/a                 | n/a                | Low  | Site to be pumped directly to adjacent STW. Avoid connecting to Cambridge STW. |

Within Wessex Water’s next Business Plan (2020-25) there are no improvements planned for Sharpness STW. An appraisal is required to better understand the potential impact that the new settlement at Sharpness (PS36) will have on the STW, as proposed growth triples the existing flows. Capacity improvements may not be possible within its existing environmental constraints, so the developer should contact Wessex Water for this assessment. Wessex Water also notes that the site is adjacent to the STW and so the impact of odour and flies on the development should be assessed.

Severn Trent noted that due to the size of the proposed site at Wisloe, it is important for them to be kept updated with any progression in design, changes to land use/units or its withdrawal, in order to appropriately account for growth in the region. It would be classed as a high-risk site if it were to connect to the Cambridge catchment to the north.

### The Severn Vale

Table 64 Severn Vale wastewater infrastructure risks

| Location           | Ref  | STW                         | Pollution Incidents | Flooding Incidents | Risk   | Comments                                    |
|--------------------|------|-----------------------------|---------------------|--------------------|--------|---|
| Frampton-on-Severn | PS33 | Frampton STW (Severn Trent) | n/a                 | n/a                | Low    | Downstream pumping station may be affected. |
| Whitminster        | PS45 |                             | n/a                 | n/a                | Low    |   |
|                    | PS46 |                             | n/a                 | 2                  | Medium | Downstream pumping station may be affected. |

There are no strategic sites within the Severn Cluster and generally there is sufficient capacity in the Severn Vale wastewater infrastructure to meet the demands of planned development.

**The Wotton Cluster**

There are no strategic sites within the Wotton Cluster and there is not likely to be significant demand for water and wastewater infrastructure arising from the levels of growth proposal.

Table 65 Wotton Cluster wastewater infrastructure risks

| Location           | Ref  | STW                          | Pollution Incidents | Flooding Incidents | Risk | Comments   |
|--------------------|------|------------------------------|---------------------|--------------------|------|--|
| Kingswood          | PS38 | Charfield STW (Wessex Water) | n/a                 | n/a                | Low  | Assessment of cumulative impacts of proposed sites required. |
| Renishaw New Mills | PS47 |                              | n/a                 | n/a                | Low  | Site not in proximity to existing network                    |

**The Cotswold Cluster**

Table 66 Cotswold Cluster wastewater infrastructure risks

The levels of growth proposed within the Cotswold Cluster are unlikely to place pressures on the water and wastewater networks.

| Location  | Ref  | STW                                | Pollution Incidents | Flooding Incidents | Risk | Comments |
|-----------|------|------------------------------------|---------------------|--------------------|------|----------|
| Painswick | PS41 | Stanley Downton STW (Severn Trent) | n/a                 | n/a                | Low  |          |

**Sector-specific Funding**

**Electricity**

WPD’s Long Term Development Statement states that prior to developers making a formal application for a connection offer, a feasibility study may be requested to better understand the viability of making a connection to the WPD network – minimum costs for this service are set out below. WPD charge for the expenses that they incur through preparing a connection offer for an application. There will be additional costs then required to secure this connection, in addition to those costs for the actual connection works.

Table 67 WPD connection charges

| Demand Required | Minimum Charge    |                        |
|-----------------|-------------------|------------------------|
|                 | Feasibility Study | Connection Application |
| 0.25MVA – 1MVA  | £496              | £918                   |
| 1MVA – 3MVA     | £634              | £1,255                 |
| 3MVA – 10MVA    | £1,412            | £2,242                 |
| 10MVA – 50MVA   | £2,118            | £4,148                 |

The costs for the connection works are dependent on the demand size, proximity to the existing network infrastructure and extent of upgrades required. Due to these variables, it is not possible to provide cost estimates at this early stage. WPD state that the average connection cost for a typical large business is £65,000+VAT<sup>135</sup>, with 35 days to receive a quotation and an average of 14 weeks to getting connected following payment. However, as the demand increases, as does the cost and lead in time – average of 2 years – and so early engagement with WPD is advised for individual sites.

<sup>135</sup> <https://www.westernpower.co.uk/connections-landing/get-a-guide-price/our-guide-price-tables>

## Gas

The price for a gas connection will vary site, with variables including proximity to the existing gas distribution network, demand required, extent of upgrades required to support this.

The gas network also operates on a first come first served basis, so sites are recommended to submit their connection application early.

## Water and Wastewater

An initial development enquiry should be completed by each developer once a masterplan has been developed, to confirm with Severn Trent that their network can supply the proposed site with potable water and receive its foul flows. This is priced at £168.39+VAT for water and £363.01+VAT for both water and wastewater<sup>136</sup>.

The cost of a water/wastewater connection will be dependent on whether the connection is a requisition laid by Severn Trent or a self-lay by the developer - and whether the self-lay is designed by Severn Trent or the developer. An individual Connection Application is priced at £1,781.92+VAT which provides a detailed breakdown of the charges.

Typically, funding for any site connections and necessary upgrades to the local network for each site come from the developer. The ongoing maintenance of the network, including any strategic water resource projects (such as new reservoirs), are funded by ratepayers.

## Conclusions

From a utility infrastructure perspective, it is unlikely that there will be any constraints that prohibit a site being developed.

It is likely that upgrades will be required at Tuffley and Berkeley primary substations in order to support the proposed Gloucester Fringe and Berkeley Cluster sites. The extent and costs of these upgrades is dependent on the local

network and substation configuration, additional proposed connections, phasing of the sites and final demand requirements for each site. The initial sites will be able to utilise the remaining available capacity at these substations. Due to planned sites in south Gloucester (outside of Stroud District), in addition to those in the Gloucester Fringe, it is possible that an additional new primary substation will be required to support Tuffley primary (forecast 2026-2030). However, WPD have noted that there are currently not sufficient justifications yet based on remaining headroom. Berkeley primary substation is likely to require upgrades to support sites beyond 2037, including reinforcement of existing OHL's. It is recommended that all developers engage early with WPD to fully understand the site-specific requirements, ahead of submitting their connection application.

It is unlikely that gas capacity will be a large constraint for the sites across the District. However, WWU require more detailed information on individual sites (such as a masterplan layout) before they are able to analyse their network model and provide formal feedback on capacity and constraints. Therefore, it is recommended that developers contact WWU to undertake this assessment once sites are progressed sufficiently.

In order to align with the UK's target for net zero greenhouse gas emissions by 2050, developers should consider the use of renewable energy sources for both electricity supply and heating. Due to the timescales of Stroud District Council's aim to be carbon neutral by 2030, it is unlikely that sites can rely on grid decarbonisation for all of their energy needs, and still align with this aim. The building standards for developments should be improved (to zero carbon standards where possible) to improve their energy efficiency and mitigate against an increase in carbon emissions.

Regionally, Severn Trent are developing their network and schemes, to support a population growth of 1.13million over the next 25 years – which the Stroud District sites are likely to be accommodated by. However, a detailed network analysis by Severn Trent is required to understand specific requirements and

<sup>136</sup> Severn Trent – New Connections Charging 2020/21



localised network upgrades. This should be undertaken on a site by site basis once a masterplan has been developed.

The proposed developments will add foul flows to wastewater networks that are already constrained in places. Both Severn Trent and Wessex Water have highlighted the sites that they think have the highest risks. Upgrades to local pumping stations and sewage treatment works are likely required to support the sites. Severn Trent have growth schemes planned for Stroud, Stonehouse, Cam and The Gloucester Fringe, however the scheme at Cam does not yet account for the additional flows from the Land at Wisloe. Wessex Water also noted that capacity improvements at Sharpness STW sufficient to accommodate the proposed developments may not be possible within their existing environmental constraints. Again, it is recommended that individual developers engage early with Wessex Water and or Severn Trent once a masterplan is developed, to enable them to model their network to fully understand the upgrade requirements.

# 13 Infrastructure Assessment: Information and Communications Technology

## Responsibility for delivery

This section covers the provision of Information and Communications Technology (ICT) infrastructure in Stroud. Delivery of ICT infrastructure is divided between the following organisations within Stroud:

**Figure 2 Responsibilities for Delivery**

| Service Provider                                 | Responsibility   |
|--|--|
| <b>Fastershire</b>                               | Fastershire is a partnership between Herefordshire Council and Gloucestershire County Council to bring faster broadband to the two counties, with funding from central government’s Broadband Delivery UK matched by the local authorities.<br><br>Broadband will be provided by BT and Gigaclear. Gigaclear has been awarded the Fastershire delivery contract for rural areas of the county. Gigaclear is a wholesale network provider and internet service provider (ISP) who specialise in connecting rural communities by installing its pure fibre network straight into the property. |
| <b>GFirst Local Enterprise Partnership (LEP)</b> | GFirst LEP is a local enterprise partnership – one of 38 in England – and is responsible for Gloucestershire’s Strategic Economic Plan. With regard to telecoms, the LEP has overseen investment via the Local Growth Fund and the EU Structural & Investment Funds Strategy into broadband across Gloucestershire.  |
| <b>Broadband Providers</b>                       | A broadband service provider is an organisation that provides services to accessing, using, or participating in the internet. Broadband service providers can be organised in various forms, such as commercial, community owned, non-profit, or otherwise privately owned. The main broadband service providers in the Stroud district are BT, TalkTalk and Sky.  |
| <b>Mobile Providers</b>                          | Mobile services are provided by the private sector. The main types of mobile services are voice, 2G, 3G, 4G and the emerging 5G. Coverage is provided by each company. There are four main mobile network operator markets operating within Stroud: EE, Three, O2 and Vodafone.  |

## Overview of progress since the 2016 IDP

### Literature, Policy and Strategy Changes

**The Stroud District IDP Refresh (2014):** The ‘Information & Communications Technology’ Chapter of the 2014 IDP set out the provision of ICT infrastructure including service providers, infrastructure needs and current projects.

The 2014 IDP outlined that ICT infrastructure has implications on the economic competitiveness of Stroud and the ability of households to access the online services such as library services, healthcare and education.

Within Stroud District, it was found that the majority of the local exchanges serving draft Local Plan allocations have now been upgraded to superfast broadband or an upgrade was scheduled to occur by the end of 2014. At that time, the Stonehouse broadband and telephone exchange was under evaluation by BT Openreach for upgrade.

New developments were to be encouraged to provide fibre optic connections from the upgraded cabinets to premises from the outset. For all developments of 25 dwellings or more, the business case for implementing these connections was expected to be within reasonable limits of viability.

Existing rural communities within Stroud were expected to fall into the ‘final third’ category in the UK that suffer from below average internet speeds and a lack of competition between services. To combat this the Borders Broadband initiative secured £14.4 million from the Government towards rolling out fibre broadband in rural areas. This was boosted with a further £7.5 million investment by Gloucestershire County Council.

It was outlined that Fastershire aimed to bring fibre broadband to around 90% of homes by the end of 2016.

Table 68 sets out the status of super-fast broadband provision in Stroud Sub-areas as identified in the 2014 IDP and where the local exchange has been upgraded.

Table 68 Status of super-fast broadband provision to exchanges in vicinity of proposed strategic locations for development

| Stroud Sub-area         | Strategic Locations and Scenarios      | Status of super-fast broadband provision                                 |
|-------------------------|--|--|
| Stroud South Vale       | North East Cam                         | Local exchange at Cam now accepting orders.                              |
|                         | Sharpness                              | Upgrade of the local exchange at Berkeley scheduled to occur by end 2014 |
|                         | Severn Distribution Park               |  |
| Stroud and West         | West of Stonehouse (1,350 dwellings)   | Local exchange at Stonehouse currently under evaluation for upgrade      |
|                         | North of Stroudwater Industrial Estate |  |
|                         | Stroud Valleys                         | Local exchanges both at Stroud and Brimscombe now accepting orders       |
| Gloucester Urban Fringe | Hunts Grove                            | Local exchange at Quedgeley now accepting orders                         |
|                         | Quedgeley East                         |  |

The above table highlights that a number of areas within the Stroud District benefitted from a recent upgrade in 2014 and that other key growth areas were being evaluated for upgrade.

The Borders Broadband Project was a pilot project to roll out fibre broadband in the ‘final third’ of properties in rural areas that are hard-to-reach, or simply not commercially viable to connect with private funding alone.

In addition to the Borders Broadband initiative, it was outlined that GFirst LEP and the County Council has worked with other partners for funding for a project which will provide a high-speed broadband business support programme.

### Changes since 2014 IDP: Overarching Documents

**National Planning Policy Framework (2019):** Chapter 10 of the NPPF focusses on supporting high quality communications across the country.

Paragraph 112 states that planning policies and decisions should support the expansion of electronic communications, networks and next generation mobile technology (such as 5G) and full fibre broadband connections. High-quality digital infrastructure and providing access to services from a range of providers is expected to be delivered and upgraded over time and should be included and considered in development and policies as appropriate.

Planning policies and decisions should prioritise full fibre connections to existing and new developments (as these connections will, in almost all cases, provide the optimum solution).

**National Infrastructure Delivery Plan (2016-2021)<sup>137</sup>:** This plan identified the Government’s role to facilitate private investment, provide policy stability and support the market. The overarching digital infrastructure strategy is based on helping the market deliver better broadband through competition. Following on from the success of the superfast roll-out programme, the Government calls on local authorities to be supportive of: planning applications which result in improved digital connectivity in their area; requests from infrastructure providers to use local government infrastructure (including street furniture); and

<sup>137</sup> Infrastructure and Projects Authority (2016) National Infrastructure Delivery Plan 2016-2021 [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/520086/2904569\\_nidp\\_deliveryplan.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/520086/2904569_nidp_deliveryplan.pdf)

encourages sharing of best practice in operating planning processes and street work management.

To help deliver greater ultrafast broadband deployment, the National Infrastructure Plan established that the government will, in partnership with the private sector, establish a new Broadband Investment Fund.

**The Effect of Built and Natural Environment of Millimetric Radio Wave (2018)**<sup>138</sup>: The research, commissioned by Department for Culture, Media and Sport (DCMS) and prepared by a consortium of 5GIC (University of Surrey), the Met Office and Ordnance Survey, considers the impact of performance of 5G networks from physical features – an area which is not currently considered. The research identified that building surface type has an impact on the ability of high-frequency signals to propagate through buildings, which in turn may reduce the coverage of cellular connections indoors.

In relation to the planning process, the paper requests that information on telecommunication asset locations is made available, as precise size and position has a significant bearing on high frequency 5G signals.

**The Future Telecoms Infrastructure Review (2018)**<sup>139</sup>: In response to Government's targets for coverage of fibre broadband through Fibre to the Premises (FTTP) by 2025, and to all areas of the country by 2033, the Future Telecoms Review has announced changes that needed to be made to meet these goals. This includes simplifying wayleave agreements to facilitate easier access to multi-dwelling units, reducing the costs and time caused by street works and standardising the approach across the country, alongside installing passive infrastructure in telecoms and other utilities.

**Analogue Telephony to Digital Voice Services & Plans for Copper Switch Off (2019)**<sup>140</sup>: Although an emerging matter, BT have announced that they are

planning to shut off all Public Switched Technology Networks (i.e. traditional landlines) and Integrated Service Digital, both of which use phone-line infrastructure which has been in place for decades. It is understood that this switch-over will take place by 2025 and will require upgrades to internet-based phone networks. It is understood Openreach are undertaking a wider industry consultation on the 'switch off'.

**Fastershire (Gloucestershire and Herefordshire) Draft Broadband Strategy 2019-2022**<sup>141</sup>: The purpose of the Strategy is to consider the latest iteration of the Fastershire Broadband Strategy, which will direct the approaches of the Fastershire project that will drive deployment of high-speed broadband infrastructure throughout Gloucestershire and Herefordshire through to 2022.

The Fastershire strategy has provided approximately 90% of the homes and businesses across Herefordshire and Gloucestershire with access to superfast broadband and speeds of 30Mbps or above.

The next stage of the strategy rollout sees BT continuing to deliver in Gloucestershire and build on their commercial deployment. Gigaclear has been awarded the broadband delivery contract for rural areas of the Gloucestershire.

For the remaining, hardest to reach properties, Fastershire will use a mix of solutions, including a bespoke grants and contract extensions to provide broadband.

**Gloucestershire: Looking to the Future 2019-2022 (Gloucestershire County Council)**<sup>142</sup>: The Looking to the Future document sets out the council's vision and level of ambition for the county over the coming years, and what it will do to support improved outcomes and quality of life for every community and business across Gloucestershire.

<sup>138</sup> Dept. for Digital, Culture, Media & Sport (2018) The effect of the built and natural environment on millimetric radio waves. Available: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/684421/OS\\_Final\\_report\\_5g-report-environment.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/684421/OS_Final_report_5g-report-environment.pdf)

<sup>139</sup> Dept. for Digital, Culture, Media & Sport (2018) Future Telecoms Infrastructure Review. Available: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/732496/Future\\_Telecoms\\_Infrastructure\\_Review.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/732496/Future_Telecoms_Infrastructure_Review.pdf)

<sup>140</sup> BT Openreach (2019) UK's digital transformation: Moving from line-based phone networks to internet-based networks)

<sup>141</sup> Fastershire (2019) Draft Broadband Strategy 2019-2022. Available: <https://glostext.gloucestershire.gov.uk/documents/s57490/Item%2010%20Appendix%20A%20Fastershire%20Strategy.pdf>

<sup>142</sup> Gloucestershire County Council (2019) Looking to the Future 2019-2022. Available: <https://www.gloucestershire.gov.uk/council-and-democracy/corporate-plans-and-strategies/looking-to-the-future-new-council-strategy/>

The document sets out the priorities and actions for the local authority over the next three years including ‘Transport, Economy and Infrastructure’. The deliverables as part of this action include:

- Secure the benefits of high-quality growth for local people and communities;
- Help business in Gloucestershire to thrive, grow and connect with the wider world; and
- Safeguard the county’s natural landscape and environment.

To help business in Gloucestershire to thrive, grow and connect with the wider world, the Strategy aims to deliver superfast broadband to every home by 2021.

**Strategic Economic Plan for Gloucestershire 2.0 Update 2018 (GFirst LEP)<sup>143</sup>:** The 2018 Update outlines a commitment to priorities set out in the 2014 Strategic Economic Plan with additional information provided.

Improving productivity in the county remains a key challenge and the latest available data suggests good progress is being made.

A weakness identified in a SWOT analysis in the 2018 Update is that residual gaps in high speed broadband coverage in rural areas still exists.

**EU Structural and Investment Fund Strategy – Gloucestershire 2014-2020 (updated 2016, GFirst LEP)<sup>144</sup>:** The EU Structural and Investment Fund Strategy (ESIF) was submitted to the Government in January 2014.

A thematic objective contained within this Strategy was that ICT is “a key enabling technology to support productivity growth among SMEs and to increase economic output in rural areas.”

Through this plan, approximately £41 million has been raised to enhance Gloucestershire’s economy and environment. £280,000 of this European funding has been committed to broadband.

<sup>143</sup> GFirst LEP (2018) Strategic Economic Plan for Gloucestershire 2.0 Update. Available: <https://www.gfirstlep.com/about-us/our-vision/strategic-economic-plan/>

**Stroud District Local Plan Review: Draft Plan (2019):** The Stroud Draft Local Plan outlines:

*“Responding to the requirements of the digital economy for super-fast broadband connections and good coverage across the District, together with the implications for living and working patterns.”*

To support Stroud District’s employment needs up to 2014, the draft local plan supports the faster roll out of broadband.

The Stroud Draft Local Plan states that the Stroud District has above average levels of self-employment and home working. Changes to working practices are linked to the roll out of fast broadband. A further increase in home working and an increase in the demand for smaller, more flexible work environments, including co-working space and live-work units are identified as a requirement.

## Scheme and Project Delivery

### ICT schemes since 2014

Securing high speed broadband has important implications for economic competitiveness and the ability of households to access the online services of other infrastructure and service providers.

ICT schemes and projects within Gloucestershire and Stroud include:

- **Fastershire:** Over the last eight years, Fastershire has provided approximately 90% of the homes and businesses across Herefordshire and Gloucestershire with access to superfast broadband and speeds of 30Mbps or above. Estimated cost has been £30m. This scheme also

<sup>144</sup> Gfirst LEP (2016) EU Structural and Investment Fund Strategy – Gloucestershire 2014-2020. Available: <https://www.gfirstlep.com/about-us/our-vision/eu-structural-investment-funds-strategy/>

includes the Marches & Gloucestershire Viable Broadband<sup>145</sup> project, which aims to provide broadband to 175 businesses and 1,800 residential hard-to-reach properties by the end of June 2020.

- **Marches and Gloucestershire Broadband Grant<sup>146</sup>:** The Grant is an ESIF funded project that began in July 2016 until December 2019. The Gloucestershire County Council led project, provided superfast broadband capability to SMEs (small and medium-sized enterprises of fewer than 250 employees) that currently fall outside of its reach.

Other nationally available schemes promoted within Gloucestershire include:

- **Gigabit Broadband Voucher Scheme<sup>147</sup>:** From March 2018, DCMS announced a fund of £67m available for the Gigabit Broadband Voucher scheme. Under this scheme, business, individually or part of a group project, can claim up to £2,500 against the cost of fibre infrastructure. Residents can claim a voucher of up to £500 if they are part of group project. It is important to note that in order to benefit from this scheme, connections must be able to reach 1 Gbps (1,000 Mbps) or more download or upload speed and maintain an ultrafast speed (100 Mbps).
- **Rural Gigabit Connectivity Programme<sup>148</sup>:** The Rural Gigabit Connectivity (RGC) Programme aims to assist Building Digital UK (BDUK) which is part of the Department for Digital, Culture, Media and Sport (DCMS), and partner organisations, in delivering more gigabit-capable connections in locations that are unlikely to benefit from commercial investment by 2033. The RGC Programme provides one-off capital payments for individual, eligible Hub connections. A site must have an internal business justification for the upgrade, take up a service from the new provision and pay ongoing costs.

- **Better Broadband Scheme<sup>149</sup>:** This programme was available to those who experienced broadband speeds below 2 Mbps and were not expected to benefit from superfast broadband within the next twelve months. Homes and businesses could claim subsidy of no more than £400 for basic broadband installation under this scheme. This scheme ended in December 2019.

## Assessment of Current Infrastructure Provision

### Broadband

As a result of the advances made in broadband connection by Fastershire and the GFirst LEP, broadband speed of >30Mbps has now achieved 92.3% coverage across Gloucestershire.

To determine the existing level of communication coverage quality in Stroud, an assessment of broadband and mobile provision has been undertaken of the 14 exchangers located in the district. ICT infrastructure quality was reviewed in May 2020, using data from the SamKnows<sup>150</sup> and Ofcom websites<sup>151</sup>.

Table 69 Existing Broadband Coverage

| Cluster        | Exchange Location | ICT Infrastructure Quality <sup>152</sup>   |
|----------------|-------------------|---|
| Stroud Valleys | Amberley          | The local area has some connection to standard broadband. There is no connection available to ultrafast broadband and superfast is only available to some in the area.<br><br>The local area has good mobile coverage to O2 and Vodafone. Varying levels of mobile coverage exist for EE and Three. |

<sup>145</sup>Fastershire (2016) Marches & Gloucestershire Viable Clusters Broadband Project. Available:

<https://www.fastershire.com/assets/file/Guidance%20Notes%20-%20Fastershire%20Viable%20Clusters%20Broadband%20Project%20v3.pdf>

<sup>146</sup> Fastershire (2016) Marches and Gloucestershire Broadband Grant <http://www.mgbroadbandgrants.com/>

<sup>147</sup> Gigabit Broadband Voucher Scheme <https://gigabitvoucher.culture.gov.uk/>

<sup>148</sup> Rural Gigabit Connectivity Programme <https://www.gov.uk/government/publications/rgc-programme-key-information>

<sup>149</sup>Better Broadband Scheme <http://sites.southglos.gov.uk/broadband/alternative-broadband-solutions/>

<sup>150</sup> SamKnows [https://availability.samknows.com/broadband/exchange\\_mapping](https://availability.samknows.com/broadband/exchange_mapping)

<sup>151</sup> Ofcom <https://checker.ofcom.org.uk/mobile-coverage>

<sup>152</sup> ‘Communication Coverage Quality’ is the level of broadband and mobile coverage provided in the local areas that have an exchanger present

| Cluster               | Exchange Location | ICT Infrastructure Quality <sup>152</sup>  |
|-----------------------|-------------------|--|
|                       | Brimscombe        | The local area has varying levels of broadband connection. The area has access to some superfast broadband connection whilst also experience standard connection <10Mbps. The local area has good mobile coverage to O2 and Vodafone. Varying levels of mobile coverage exist for EE and Three.  |
|                       | Nailsworth        | The local area is generally well connected but connection to Ultrafast broadband is not available. Some parts of the area experience standard broadband connection. The local area has good mobile coverage to all mobile network providers.   |
|                       | Stroud            | The local area has varying levels of broadband connection. The area has access to some superfast broadband connection whilst also experience standard connection <10Mbps. The local area has good mobile coverage to all mobile network providers.   |
| Stonehouse Cluster    | Stonehouse        | The local area is generally well connected but connection to Ultrafast broadband is not available. The local area has good mobile coverage to all mobile network providers.  |
| Cam & Dursley         | Uley              | The local area has variable levels of broadband connection. Ultrafast broadband is available to some locally and others only have access to standard broadband. The local area has varying levels of mobile coverage for EE and Three. The local area has limited levels of mobile coverage to Vodafone and O2. No coverage is provided in some instances. |
|                       | Dursley           | The local area has some connection to standard broadband. There is no connection available to ultrafast broadband and superfast is only available to some in the area. The local area has good mobile coverage to all mobile network providers.  |
| The Gloucester Fringe | Hardwicke         | The local area is generally well connected with connection to standard, superfast and ultrafast broadband available.   |

| Cluster              | Exchange Location | ICT Infrastructure Quality <sup>152</sup>   |
|----------------------|-------------------|---|
|                      |                   | The local area has good mobile coverage to all mobile network providers.  |
| The Berkeley Cluster | Cambridge         | The local area mostly has connection only to standard broadband. There is no or very limited access to superfast or ultrafast broadband in the area. The local area has limited levels of mobile coverage to all mobile network providers. No coverage is provided in some instances. |
|                      | Berkeley          | The local area has variable levels of standard and superfast broadband connection. No ultrafast broadband connection is available in the area. The local area has limited levels of mobile coverage to all mobile network providers. No coverage is provided in some instances.       |
| The Severn Vale      | Saul              | The local area is generally well connected but connection to Ultrafast broadband is not available. The local area has limited or no level of mobile coverage to all mobile network providers.   |
| The Wotton Cluster   | Wotton Under Edge | The local area has variable levels of broadband connection. Most have access to superfast or ultrafast broadband, but some others only have access to standard broadband. The local area has good mobile coverage to all mobile network providers.                                    |
| The Cotswold Cluster | Painswick         | The local area is generally well connected but connection to Ultrafast broadband is not available. The local area has limited or no level of mobile coverage to all mobile network providers.   |
|                      | Bisley            | The overall area is well connected with connection to Ultrafast broadband available. The local area has limited or no level of mobile coverage to all mobile network providers.   |

There are varying levels of broadband and mobile coverage within Stroud. Broadband can vary within each individual cluster, with instances of standard, superfast and ultrafast broadband connection being available in a single local



area. Ultrafast broadband is still not widely available throughout Stroud, with some local areas still not having no access to this form of broadband connection. Superfast or standard broadband connection is available in most local areas Stroud, but instances of no broadband connection being available exists. The quality of broadband connection between providers can vary across Stroud.

Mobile coverage is generally good within the largest settlements, achieving good mobile data and voice coverage for most. Mobile coverage in rural areas is generally less good, with there being areas where there is no coverage available in some instances.

## Planned Provision and Scheme Identification based on revised Housing and Employment Needs

### District-wide summary of requirements

Table 70 ICT Infrastructure Delivery provides recommendations for future ICT infrastructure delivery in relation to Strategic Development Sites in the 2019 Draft Local Plan. A review of broadband and mobile availability data for the proposed strategic sites was completed in May 2020 using SamKnows and Ofcom. Many of the strategic sites do not have identified postcodes or cover sizeable areas. Assessments have been undertaken to the greatest level of detail possible to provide a recommendation for the site's future broadband and mobile infrastructure requirements.

Given that the location of many of the proposed strategic sites is within or adjacent to existing settlements, it has been assumed that broadband and mobile coverage is generally good.

Table 70 ICT Infrastructure Delivery

| Cluster         | Strategic Development Sites | ICT Infrastructure Delivery   |
|-----------------|-----------------------------|---|
| Cam and Dursley | Cam North West              | It is likely that broadband infrastructure improvement will be required for the planned growth location. This is due to the scale of the proposed site, the lack of broadband |

| Cluster           | Strategic Development Sites | ICT Infrastructure Delivery   |
|-------------------|-----------------------------|---|
|                   |                             | connection on the current site proposed and the current limited access to broadband in the surrounding local area. No mobile infrastructure improvements were identified as required. The surrounding local area currently has variable levels of mobile coverage to all mobile network providers.  |
|                   | Cam North East Extension    | It is likely that broadband infrastructure improvement will be required for the planned growth location. This is due to the scale of the proposed site and the current limited access to broadband in the surrounding local area. No mobile infrastructure improvements were identified as required. The surrounding local area currently has variable levels of mobile coverage to all mobile network providers.   |
| Gloucester Fringe | South of Hardwicke          | It is likely that broadband infrastructure improvement will be required for the planned growth location. This is due to the scale of the proposed site and the lack of broadband connection on the current site proposed. Varying levels of broadband connection is available to different parts of the surrounding local area. Mobile infrastructure improvement could be required for the planned growth location. The surrounding local area currently has good levels of mobile coverage to EE, O2 and Vodafone. Mobile connection to Three can vary in the surrounding local area. |
|                   | Hunts Grove Extension       | It is likely that broadband infrastructure improvement will be required for the planned growth location. This is due to the scale of the proposed site and the lack of broadband connection on the current site proposed. Varying levels of broadband connection is available to different parts of the surrounding local area. No mobile infrastructure improvements were identified as required. The surrounding local area currently has good levels of mobile coverage to all mobile network providers.   |
|                   | Javelin Park                | It is likely that broadband infrastructure improvement will be required for the planned growth location. This is due to the scale of the proposed site and the lack of broadband  |

| Cluster            | Strategic Development Sites | ICT Infrastructure Delivery   |
|--------------------|-----------------------------|---|
|                    |                             | connection on the current site proposed. Varying levels of broadband connection is available to different parts of the surrounding local area.<br>No mobile infrastructure improvements were identified as required. The surrounding local area currently has good levels of mobile coverage to all mobile network providers.   |
|                    | Quedgeley East Extension    | It is likely that broadband infrastructure improvement will be required for the planned growth location. This is due to the scale of the proposed site and the lack of broadband connection on the current site proposed. Varying levels of broadband connection is available to different parts of the surrounding local area.<br>No mobile infrastructure improvements were identified as required. The surrounding local area currently has good levels of mobile coverage to all mobile network providers.                      |
| The Wotton Cluster | Renishaw New Mills          | It is likely that broadband infrastructure improvement will be required for the planned growth location. This is due to the scale of the proposed site and the lack of broadband connection on the current site proposed. Varying levels of broadband connection is available to different parts of the surrounding local area.<br>No mobile infrastructure improvements were identified as required. The surrounding local area currently has variable levels of mobile coverage to all mobile network providers.                  |
| Berkeley Cluster   | Sharpness Docks             | It is likely that broadband infrastructure improvement will be required for the planned growth location. This is due to the scale of the proposed site and the lack of broadband connection on the current site proposed. Varying levels of broadband connection is available to different parts of the surrounding local area.<br>Mobile infrastructure improvements could be required to serve the development site. The surrounding local area currently has variable levels of mobile coverage to all mobile network providers. |

| Cluster            | Strategic Development Sites  | ICT Infrastructure Delivery  |
|--------------------|------------------------------|--|
|                    | Sharpness                    | It is likely that broadband infrastructure improvement will be required for the planned growth location. This is due to the scale of the proposed site and the lack of broadband connection on the current site proposed. Varying levels of broadband connection is available to different parts of the surrounding local area.<br>It is likely that mobile infrastructure improvements will be required to serve the development site. The surrounding local area currently has variable levels of mobile coverage to all mobile network providers. |
|                    | Wisloe                       | It is likely that broadband infrastructure improvement will be required for the planned growth location. This is due to the scale of the proposed site and the lack of broadband connection on the current site proposed. Varying levels of broadband connection is available to different parts of the surrounding local area.<br>No mobile infrastructure improvements were identified as required. The surrounding local area currently has good levels of mobile coverage to all mobile network providers.                                       |
| Stonehouse Cluster | Stonehouse North West        | It is likely that broadband infrastructure improvement will be required for the planned growth location. This is due to the scale of the proposed site and the lack of broadband connection on the current site proposed. Varying levels of broadband connection is available to different parts of the surrounding local area.<br>No mobile infrastructure improvements were identified as required. The surrounding local area currently has good levels of mobile coverage to all mobile network providers.                                       |
|                    | Stonehouse – Eco park M5 J13 | It is likely that broadband infrastructure improvement will be required for the planned growth location. This is due to the scale of the proposed site and the lack of broadband connection on the current site proposed. Varying levels of broadband connection is available to different parts of the surrounding local area.  |

| Cluster              | Strategic Development Sites                                   | ICT Infrastructure Delivery   |
|----------------------|---|---|
|                      |   | No mobile infrastructure improvements were identified as required. The surrounding local area currently has good levels of mobile coverage to all mobile network providers.   |
| The Severn Vale      | No strategic development site within the Severn Vale cluster. | As set out previously, the local area is generally well connected but connection to Ultrafast broadband is not available.<br>The local area has limited or no level of mobile coverage to all mobile network providers.   |
| The Cotswold Cluster | No strategic development site within the Cotswold cluster.    | As set out above, the local area has variable levels of broadband connection. Most have access to superfast or ultrafast broadband, but some others only have access to standard broadband.<br>The local area has good mobile coverage to all mobile network providers. |

Future broadband and mobile infrastructure requirements are not typically considered to be a barrier to development; however, it is recommended that developers engage with utilities providers at an early stage to understand whether infrastructure investment is required.

## Sector-specific Funding

Broadband infrastructure on proposed sites should be installed as a cost to BT Openreach. This service is free to developers for sites of over 20 homes and includes full fibre installation. For sites of 2-19 homes, a contribution of between £2,000 and £9,000 should be borne by the developer to install fibre to the premises.

The review has identified numerous different funding support streams for improvement broadband and mobile connectivity within existing homes in Gloucestershire and the Phase 2 rollout of Fastershire will support investment in hard to reach areas.

## Conclusions

Communications infrastructure has improved considerably in Stroud District over the last eight years due to investment from the Local Enterprise Partnership and County Council through the Fastershire programme.

Despite this, a desk-based assessment of the existing communications infrastructure has revealed that there are still varying levels of broadband coverage and ultrafast broadband is frequently unavailable, even within the main settlements.

The Phase 2 rollout of Fastershire will provide broadband to a number of hard-to-reach areas, improving connectivity further. Nearly all of the proposed strategic sites identified will require an investment to be made in telecoms infrastructure to improve coverage and speeds. It is anticipated that the cost of these improvements, which include full fibre installation, will be borne by BT Openreach under their statutory duty to provide communications infrastructure to sites of more than 20 dwellings.

Smaller sites may have to pay up to £9,000 for a connection to fibre broadband. It is expected that this cost will be borne by the developer.

## 14 Infrastructure Assessment: Waste

### Responsibility for delivery

There is a mixture of public and private bodies responsible for the management and disposal of waste and recycling in Stroud District.

| Service Provider  | Responsibility  |
|---|---|
| <b>Gloucestershire County Council</b>                         | The County Council is the statutory Waste Disposal Authority as defined by the Environmental Protection Act 1990. These authorities are responsible for the management of waste disposal and have responsibility for preparation of the Minerals and Waste Local Development Framework (LDF)  |
| <b>Gloucestershire Resources and Waste Partnership (GRWP)</b> | The Gloucestershire Resources and Waste Partnership (GRWP) supersedes the Gloucestershire Joint Waste Committee, which closed in December 2019. The GRWP consists of the six district and borough councils within Gloucestershire and the County Council. The Partnership aims to ‘provide countywide leadership and a framework for joint working between its Council Members on resources and waste related matters.’ |
| <b>Stroud District Council</b>                                | Responsibility for managing the collection of waste from households and businesses in Stroud.   |
| <b>Private Waste Companies</b>                                | Commercial, industrial and hazardous waste is generally managed by the private sector.  |

### Overview of progress since the 2016 IDP

#### Literature, Policy and Strategy Changes

**The Stroud District IDP Refresh (2014):** The waste chapter of the 2014 IDP sets out the operational waste capacity of Stroud District, based on the Waste Core Strategy, of 110,000 tonnes of recycling and 3.2m<sup>3</sup> of non-hazardous

<sup>153</sup> National Planning Policy Framework 2019  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/810197/NPPF\\_Feb\\_2019\\_revised.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf)

landfill. The following household recycling centre (HRC) waste management sites serving Stroud District were identified:

- Pyke quarry HRC – located near Horsley on the B4058 Wotton-under-Edge Road.
- Hempsted HRC – located 1 mile west of Gloucester Docks (in Gloucester).

The IDP identifies that there is an on-going need to develop new waste facilities in Gloucestershire and enable diversion from landfill use. These actions are outlined in the Waste Core Strategy a response to the national policy of tackling climate change through more sustainable waste alternatives. The following locations in the Stroud District for new or remodelled waste management facilities:

- Javelin Park - This 5-hectare site is currently vacant and owned by Gloucestershire County Council.
- Land at Moreton Valence - This 7-hectare site is partly used for light industrial and waste management. The operators of the site, Smiths (Gloucester) Ltd. have confirmed that the site is available for strategic waste management use.

At the time, the County Council advised that HRCs were reaching capacity and therefore the need for additional capacity at Pyke Quarry and Hempsted will need to be kept under review.

### Changes since 2014 IDP: Overarching Documents

**National Planning Policy Framework (2019)<sup>153</sup>:** The NPPF sets an objective to improve the environment by using natural resources prudently and minimising waste and pollution. Section 17 of the NPPF outlines that planning policies should facilitate the sustainable use of minerals. The NPPF 2019 continues to state that the Framework should be read in conjunction with the Government’s

Planning Policy for Waste, which was prepared in October 2014.

**National Planning Policy for Waste (2014)**<sup>154</sup>: The NPPW sets out the principles of utilising the waste hierarchy; preventing waste, re-use, recycling, recovery and then disposal. It provides advice to waste disposal authorities in respect of creating their own Local Plans and encourages planning new capacity and working collaboratively with other planning authorities. It sets out how need for waste management sites should be assessed and how suitable sites or areas can be identified.

**Our Waste, Our Resources: A Strategy for England (December 2018)**<sup>155</sup>: The national strategy for waste sets out principles for sustainable production, which utilises fewer resources and uses recycled materials. It sets out how information and choice can help consumers to make more sustainable choices and establishes principles for resource recovery and waste management. It also includes approaches to tackle ‘waste crime’ such as fly-tipping and cutting down food waste. It sets out that by 2050; the UK should double resource productivity and eliminate all avoidable waste. All plastic packaging should be recyclable or reusable by 2025 and food waste to landfill should be eliminated by 2030.

**Gloucestershire Resources and Waste Partnership Terms of Reference (2019)**: This document was presented to the County Council’s cabinet in 2019 to establish the GRWP. It sets out an approach to joint working between the county and six district, city and borough councils including Stroud. It sets out principles for the GRWP to treat waste in accordance with the waste hierarchy, to improve waste management, to share plans for the development of future services and ensure cost effectiveness. It sets out that a Gloucestershire Resources and Waste Strategy will be developed, however timescales for this have not been defined.

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<sup>154</sup> Dept. for Communities and Local Government (2014) National Planning Policy for Waste. Available: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/364759/141015\\_National\\_Planning\\_Policy\\_for\\_Waste.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/364759/141015_National_Planning_Policy_for_Waste.pdf)

**The Gloucestershire Waste Core Strategy**: The Waste Core Strategy has not been updated since 2012 and the assessment within the 2014 IDP remains relevant.

**Stroud District Local Plan Review: Draft Plan (2019)**<sup>156</sup>: The Pre-submission Draft Local Plan identifies the two sites; Javelin Park and Land at Moreton Valence, for strategic residual recovery facilities that have been allocated in the adopted Gloucestershire WCS.

Core Policy CP5 sets out environmental development principles for strategic sites including minimising waste and maximising recycling and Core Policy CP14 sets out principles for high quality sustainable development including provision for recycling. Delivery Policy ES1 sets out requirements for sustainable construction and design including minimising waste and maximising the recycling of any waste generated during construction and in operation.

The Javelin Park site is identified as a positive stimulus to the development of complementary innovative business opportunities on surrounding employment sites. The site will also offer combined heat and power opportunities to nearby housing.

## Scheme and Project Delivery

### Schemes since 2014: Waste

- **Javelin Park Energy from Waste Facility**<sup>157</sup>: A 190,000 tonnes-per-year capacity EfW plant, managed by Urbaser Ltd and Balfour Beatty which opened in June 2019 and uses residual waste from across Gloucestershire.
- **Moreton Valence Recycling Facility**: A planning application was approved in February 2019 to extend the existing waste facility at Moreton Valence to include household recycling and waste transfer.

<sup>155</sup> Our Waste, Our Resources: A Strategy for England - [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/765914/resources-waste-strategy-dec-2018.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/765914/resources-waste-strategy-dec-2018.pdf)

<sup>156</sup> Stroud District Local Plan Review (2019) [https://www.stroud.gov.uk/info/Draft\\_Plan\\_2019.pdf](https://www.stroud.gov.uk/info/Draft_Plan_2019.pdf)

<sup>157</sup> Javelin Park. Available: <https://www.ubbgloucestershire.co.uk/about-us>

## Assessment of Current Infrastructure Provision

There are three main household recycling centres which serve Stroud District<sup>158</sup>. These are: Pyke Quarry near Horsley in the Stroud Valleys Cluster; Hempsted Recycling Centre on the edge of Gloucester and Fosse Cross to the north of Cirencester.

A further recycling site at Moreton Valence was approved at the existing waste transfer facility in the Severn Vale Cluster in February 2019.

As set out above, the Urbaser Balfour Beatty Energy from Waste Facility is a £500m combustion plant at Javelin Park. The site is located within Stroud’s Gloucester Fringe Cluster.

The facility diverts approximately 90% of Gloucestershire’s residual waste that would usually go to landfill (waste left following recycling). The plant started accepting waste in June 2019 and became fully operational in January 2020 and will be accepting up to 190,000 tonnes of residual waste each year from the Waste Collection Authorities.

There are three non-hazardous landfill sites in Gloucestershire, however none are in Stroud. These are: Hempsted, to the east of Gloucester; and Wingmoor Farm (West) and Wingmoor Farm (East) close to Bishop’s Cleeve North West of Cheltenham. A hazardous landfill site is provided at Wingmoor Farm (East).

Defra publishes the amounts of waste collected by local authorities. In 2018-19 a total of 35,062 tonnes of waste was collected in Stroud<sup>159</sup>. Of this, 34,731 tonnes were from households and 331 tonnes were from non-households. 60% of waste was taken for recycling, composted or reused.

<sup>158</sup> Household Recycling Centres. Available: <https://www.stroud.gov.uk/environment/bins-rubbish-and-recycling/recycling/recycling-centres-tips>

## Planned Provision and Scheme Identification based on revised Housing and Employment Needs

### District-wide standards and benchmarks

The Gloucestershire Waste Core Strategy sets out that an additional strategic site for the management for municipal residual waste is required of about five hectares and an additional facility is required for commercial and industrial waste of up to eight hectares.

The development of the two new facilities at Javelin Park and Moreton Valence are considered to be sufficient to address the demand set out in the Waste Core Strategy, with a residual waste capacity identified as being needed of up to 145,000 tonnes per year and Javelin Park alone providing up to 190,000 of waste management capacity.

All development should apply the waste hierarchy set out in the Waste Core Strategy and be designed in such a way to minimise waste, encourage re-use and enable recycling.

Within Stroud, each home should be provided with a green wheelie bin for recycling, food waste bins and a grey wheelie bin for non-recyclable waste. Developers should consult with the County Council to determine site-specific requirements for waste provision.

### Sector-specific Funding

Each Waste Disposal Authority has responsibility for funding its own service for household services. Commercial waste providers are either contracted to cover the operation and management of facilities within Stroud (such as at Javelin Park) or contracted to provide waste disposal to businesses.

<sup>159</sup> Defra (2019) Local authority collected waste: annual results tables. Available: <https://www.gov.uk/government/statistical-data-sets/env18-local-authority-collected-waste-annual-results-tables>

The Gloucestershire Resource and Waste Partnership is funded by each of the partner councils.

There are limited options in terms of grant funding from central government, however Defra and the Waste and Resources Action Programme (WRAP) do provide monies to redistribution of waste and to technological improvements.

## Conclusions

The development of the Javelin Park and Moreton Valence facilities has helped to future proof the management of waste within Stroud District. This additional capacity was identified as being required within the Waste Core Strategy and has now been delivered.

Development should seek to reduce waste and increase reuse and recycling in accordance with the waste hierarchy. Early engagement with waste disposal authorities is recommended to ensure that onsite waste management is designed appropriately.



## 15 Delivery Strategy

Infrastructure to support planned future growth can be delivered in a variety of ways as summarised in the table below:

Table 72 – Delivery Mechanisms

|  |   |
|--|---|
| <b>Site Allocation Policies</b>                  | Infrastructure requirements are identified in a planning policy to support the delivery of a site allocation. This may include on-site or off-site infrastructure requirements.   |
| <b>Development Contributions Policies</b>        | Financial or non-financial obligations funded by the developer or landowner. This includes Section 106 planning obligations, Section 278 highway agreements, the Community Infrastructure Levy, and Tax Increment Funding.  |
| <b>Direct Provision by Statutory Undertakers</b> | This includes the utilities and telecommunications companies whose investment in infrastructure comes from the charges made to customers  |
| <b>Private Sector Funding &amp; Investment</b>   | Private capital may be invested in infrastructure and infrastructure investors generally operate internationally. Future private investment in infrastructure is likely to be in the energy, digital, water and waste sectors. To attract private finance, an infrastructure project needs to have a source of revenue. |
| <b>Public Sector Funding</b>                     | This includes funding from central or local government. Central government has a number of grants available for infrastructure improvements, such as the Housing Infrastructure Fund, New   |

|  |   |
|--|---|
|  | Homes Bonus, Local Growth Deal and One Public Estate.   |
| <b>Third Sector Funding (Community &amp; Voluntary Sector)</b> | Improvements to infrastructure can be delivered for example, through fund raising, redevelopment of assets and bequests/ gifts/ legacies. |

Infrastructure requirements to support proposed growth will be funded through a variety of different mechanisms and in a number of cases funding will be from a mix of sources. As far as possible, the IDP has identified the potential funding sources for each of the infrastructure projects as well as any funding secured at the time of writing. There are several key sources of funding that the planning system can influence. In addition, Stroud District Council will actively seek other funding opportunities to secure infrastructure.

The Local Plan Review, Policy CP6, is unchanged from the Local Plan (adopted 2015) and sets out the principle:

*“where implementation of a development would create a need to provide additional or improved infrastructure and amenities, would have an impact on the existing standard of infrastructure provided, or would exacerbate an existing deficiency in their provision, the developer will be expected to make up that provision for those local communities affected. Where the developer is unable to make such provision, the Council will require the developer to make a proportionate contribution to the overall cost of such provision through a legal agreement and/or Community Infrastructure Levy.”*

It is expected that this approach of requiring developers to mitigate development impacts is embedded within the future development strategy.

Community infrastructure levy receipts should be utilised to deliver infrastructure to mitigate cumulative impacts arising from smaller sites. Where growth is reliant on the development of small sites, it is recommended that CIL contributions are pooled to deliver infrastructure with wider benefits.

Moving forward, it will be important to prioritise those projects and schemes which must be implemented to enable the delivery of growth within Stroud, followed by those projects that are required if growth is to be achieved in a timely and sustainable manner, with those projects that are likely to be desirable and unlikely to prevent growth if not delivered to be delivered where budgets allow. This prioritisation will enable the identification of those issues that are the key risks to plan delivery.

Public and private partnership will be vital to addressing these risks and appropriate governance arrangements will need to be put in place to implement mitigation. Given the cross-boundary nature of a number of complex issues highlighted in this IDP, partnership arrangements should include adjoining Local Planning Authorities in Gloucester, Cotswold and South Gloucestershire under the Duty to Cooperate.

It is recommended that regular updates are made to the Infrastructure Delivery Plan as infrastructure is implemented through the delivery of the Adopted Stroud Plan and completion of development sites. A Project Tracker will be created and should be monitored and updated alongside the IDP.

Moving forward, the District Council should use the IDP to inform the preparation of an Infrastructure Funding Statement in accordance with Planning Practice Guidance (Plan-making, paragraph 16<sup>160</sup>). This should set out the anticipated funding from developer contributions, and the choices local authorities have made about how these contributions will be used. At examination this can be used to demonstrate how infrastructure can be delivered throughout the plan-period.

Comments from stakeholders and developers on this IDP as part of the October 2020 consultation on the Pre-submission Draft Local Plan are welcomed and can be accounted for in the infrastructure position for development sites and can help to identify solutions and mitigation to the issues raised.

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<sup>160</sup> Ministry of Housing, Communities & Local Government (July 2020) Plan Making Available: <https://www.gov.uk/guidance/plan-making>