

Stroud District Council  
**Infrastructure Delivery Plan**  
Infrastructure Funding Gap Analysis

Issue | 3 August 2016

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 246196-00

**Ove Arup & Partners Ltd**  
63 St Thomas St  
Bristol  
BS1 6JZ  
[www.arup.com](http://www.arup.com)

**ARUP**

# Contents

---

	Page	
<b>1</b>	<b>Introduction</b>	<b>1</b>
1.1	Background	1
1.2	Approach	1
<b>2</b>	<b>Sub-area Infrastructure Costs</b>	<b>2</b>
2.1	Total Infrastructure Costs	2
2.2	Prioritised Infrastructure Costs	3
<b>3</b>	<b>CIL Forecast</b>	<b>5</b>
<b>4</b>	<b>Alternative Funding &amp; Funding Gap Analysis</b>	<b>7</b>
4.1	Education	7
4.2	Healthcare	7
4.3	Transport	7
4.4	Flood Risk and Water Management	8
4.5	Summary of infrastructure funding, costs and shortfall	9

# 1 Introduction

---

## 1.1 Background

Since Local Plan Adoption in November 2015, Arup has continued to support Stroud District Council on infrastructure delivery matters. This has included assessment of the infrastructure requirements for the Strategic Allocations from the Local Plan and the updating of the 2013 Plan Viability Study to support the preparation of the revised Draft CIL charging schedule for Stroud.

This note sets out the gap between the costs associated with identified projects and benchmarks from the previous work, and anticipated sources of funding.

## 1.2 Approach

The purpose of this document is to demonstrate that a funding gap exists in Stroud District between the infrastructure required to support the development set out in the Local Plan and the anticipated funding sources of funding.

The funding gap analysis contains information extracted from the outcomes of detailed discussions with service providers undertaken in February 2016, the Stroud Infrastructure Delivery Plan (IDP) (2014), Stroud District Local Plan (2015), Local Plan Stage 2 Hearing Statements and the Atkins Stroud Junction Assessment Technical Note (April 2015).

This note sets out the likely costs that are directly associated with prioritised infrastructure that is considered to be CIL-chargeable. These infrastructure items have been grouped into the following types:

- Education
- Transport
- Flood risk management
- Healthcare

In demonstrating the funding gap, the cumulative costs for all infrastructure types has been set out, as has the cumulative costs for infrastructure projects and benchmarks associated with the above topics.

Consideration has been given to the likely quantities of CIL receipts for the growth set out in the Local Plan, with consideration given to the removal of a percentage of receipts to be top-sliced by Parish Councils or Neighbourhood Development Forums with an adopted Neighbourhood Plan as set out in the Community Infrastructure Levy Regulations 2010.

A comparison is then made between anticipated funding sources and the likely CIL forecast.

## 2 Sub-area Infrastructure Costs

### 2.1 Total Infrastructure Costs

The IDP provides a high level view of infrastructure requirements based on population forecasts between 2016 and 2031 and cost assessments using accepted benchmark standards for education, open space, sport and recreation and community facilities. A review of the Atkins Stroud Junction Assessment Technical Note and discussions with Gloucestershire Highways has provided costs for transport projects. Discussions with Gloucestershire County Council's Flood Risk Team has revealed the cost of required flood risk management projects.

Figure 1 – Infrastructure Costs associated with housing growth in Stroud District

Location / Allocation	Housing growth (2016-2031)	Infrastructure costs
Stroud Valleys (SA1)	450 dwellings	£7,112,146
West of Stonehouse (SA2)	1350 dwellings	£9,352,296
North East of Cam (SA3)	450 dwellings	£5,730,551
Hunts Grove Extension (SA4)	750 dwellings	£3,627,668
Sharpness Docks (SA5)	300 dwellings	£5,349,279
Windfall sites	2094 dwellings	£34,918,728
<i>Total</i>	5394 dwellings	£66,090,668

The total infrastructure cost across the district, based upon benchmarked costs and identified projects / mitigation is estimated at **£66,090,668**.

An allowance has been made for 2094 dwellings as windfall. This is greater than the 750 dwellings identified in the Local Plan, however historic windfall rates indicate that larger sites (of 10 or more dwellings) will continue to come through the planning system during the remainder of the plan period and will be liable for CIL charging. The following quantum of development is anticipated:

Site type	Housing growth (2016-2031)
Small windfall sites	734 dwellings (identified in the Local Plan)
Large windfall sites	1360 dwellings (based upon historic rates of delivery)
<i>Total</i>	2094 dwellings

Throughout the Infrastructure Delivery Plan Update, an approach of prioritisation has been applied when assessing infrastructure requirements. This sets out that projects are identified and assigned to one of the following four broad categories:

- Regionally Critical Infrastructure – Projects that have wider geographic area implications than Stroud District which must happen to enable the delivery of growth within the District and beyond.

- Critical Infrastructure – Projects that the study has identified which must happen to enable the delivery of growth within Stroud District.
- Essential Infrastructure – Projects that are required if growth is to be achieved in a timely and sustainable manner.
- Desirable Infrastructure – Projects that are required for sustainable growth but is unlikely to prevent development in the short to medium term.

The following section sets out the associated infrastructure costs with prioritised infrastructure, assigned to either the Regionally Critical, Critical or Essential categories.

## 2.2 Prioritised Infrastructure Costs

In order to manage any funding gap Stroud District Council should develop a prioritisation process for the spending of any CIL and S106 monies, taking account of:

- Spatial growth projections and the anticipated phasing of strategic sites.
- The importance of physical infrastructure for enabling development.
- Opportunities to deliver specific infrastructure through, for example, new funding opportunities.
- The prioritisation of infrastructure as set out in section 2.1

This will reduce the funding gap and allow for CIL receipts to be used efficiently and effectively.

These priorities have been chosen because there is a specified need for the infrastructure to support the sustainable growth set out in the Local Plan, or the review of evidence base and consultation with infrastructure providers has led to specific projects being identified.

Figure 3 overleaf sets out a proportion of infrastructure costs based upon benchmarks and identified projects and mitigation which are considered to be priorities. These specifically relate to transport, healthcare, education and flood risk management.

Prioritisation of infrastructure projects and mitigation will enable a reduction of the funding gap by managing total infrastructure costs associated with the growth set out in the Local Plan from approximately of £66million to an estimated total of **£40,491,643**.

Figure 2 – Prioritised Infrastructure Costs and Funding for Stroud District

Infrastructure Type / Project	Cost	Other Funding Sources	Funding Deficit
Education Early Years	£2,900,000	Basic Need Capital Allocation (Unknown)	£2,900,000
Education Primary	£6,290,000	Basic Need Capital Allocation (Unknown)	£6,290,000
Education Secondary (inc. sixth form)	£6,030,000	Basic Need Capital Allocation (Unknown)	£6,030,000
Education Further	£1,750,000	Basic Need Capital Allocation (Unknown)	£1,750,000
Healthcare GPs	£760,820	None	£760,820
	£3,360,000 (Beeches Green surgery)	CCG / NHS / Private practice	0
	£1,550,000 (Minchinhampton surgery)	CCG / NHS / Private practice	0
Healthcare Dentists	£415,407	None	£415,407
Healthcare Acute	£690,672	None	£690,672
Transport	£3,544,744	None	£3,544,744
	£4,000,000 (A419 Corridor Improvements)	Growth Deal	0
	£1,200,000 (Improved access to Berkeley)	Growth Deal	0
	£2,000,000 (A38 Berkeley Bridges)	Growth Deal	0
Flood Risk / Water Management	£1,000,000 (Slad Brook Property Protection)	None	£1,000,000
	£5,000,000 (Brinscombe Port)	Local Growth Fund (£1,500,000)	£3,500,000
<b>Total</b>	<b>£40,491,643</b>	<b>N/A</b>	<b>£26,881,643</b>

### 3 CIL Forecast

To inform the assessment of the funding shortfall it is necessary to understand the anticipated value of the CIL receipts within the Local Plan period, subsequent to the adoption and implementation of CIL for Stroud District.

The infrastructure costs for Stroud Valleys, West of Stonehouse, North East Cam, Hunts Grove and Sharpness have been excluded from this exercise as the Strategic Allocations are zero rated in the CIL Draft Charging Schedule and all planning obligations including offsite infrastructure requirements will be dealt with through S106 Agreements. The packages of infrastructure required for the Strategic Allocations (excluding West of Stonehouse) are set out in a series of Infrastructure Position Statements produced in April 2016 by Arup.

Figure 4 contains the projection of CIL income from 2016 through to 2031, informed by information on anticipated housing numbers extracted from the Council's most up to date Housing Trajectory. This assumes that CIL would be adopted immediately.

There are a number of assumptions within the calculation of anticipated CIL receipts which are set out below:

- Based upon viability testing of sites undertaken by HDH Planning, the calculation of total CIL forecast is based upon an assumed average dwelling size of 90m<sup>2</sup>.
- Policy CP9 within the Local Plan (2015) sets out the affordable housing requirement is up to 30% of new dwellings on sites of 4 homes or greater.<sup>1</sup> CIL is not liable on affordable dwellings, so a reduction of 30% has been made to calculate qualifying units. The resultant split of housing is set out below:

Figure 3 – Dwellings Liable for CIL

Site type	Housing growth (2016-2031)	Dwellings liable for CIL (30% Reduction for AH)
Small windfall sites	734 dwellings	734 dwellings
Large windfall sites	1360 dwellings	952 dwellings
<i>Total</i>	2094 dwellings	1686 dwellings

Infrastructure needs associated with housing growth on the five Strategic Allocations will be mitigated through Section 106 Agreements, and have not been accounted for within the housing trajectory for CIL calculation.

<sup>1</sup> The Court of Appeal has decided (May 2016) to restore the government policy removing the requirement to provide affordable housing on sites of less than 10 homes. The affordable housing requirement of up to 30% of new dwellings is now applicable on sites of 10 homes or greater and not on sites greater than 4 dwellings as initially set out in Policy CP9.

The total anticipated CIL receipts Stroud District Council, as charging authority, may expect to receive from the windfall elements of planned growth is **£12,141,120**.

Under Regulation 59A of the Community Infrastructure Levy (Amendment) Regulations 2013, Parish and Town Councils will receive 15% of CIL charging authority receipts. In addition, a proportion, 5% of CIL receipts can be retained by SDC for administrative purposes. Following these deductions, the net total CIL payments anticipated is **£9,712,896**. Parish and Town Councils may choose to invest their local proportion back into projects on the Regulation 123 List, however they are not obligated to do so.

**Figure 4 - CIL Forecast for Stroud District (2016-2031)**

	2015-2020	2020-2025	2025-2030	2030-2031	TOTAL
Total Projections for qualifying sites	391	610	575	110	1,686
Avg. unit size (sqm)	90	90	90	90	
Total Floorspace liable for CIL (sqm)	35,214	54,900	51,750	9,900	151,764
Gross CIL receipts at £80/sqm (£)	2,817,120	4,392,000	4,140,000	792,000	12,141,120
Total topslice for parish councils (£)	422,568	658,800	621,000	118,800	1,821,168
CDC Admin topslice (£)	140,856	219,600	207,000	39,600	607,056
<b>Net CIL receipt to service Reg. 123 Requirements (£)</b>	<b>2,253,696</b>	<b>3,513,600</b>	<b>3,312,000</b>	<b>633,600</b>	<b>9,712,896</b>

A parish or town council with an adopted neighbourhood plan will benefit from 25 per cent of CIL revenues arising from the development that takes place in their area. 15 parishes and town councils have emerging neighbourhood plans, but, due to the nature of windfall development (it being unplanned) it is not possible to calculate the quantity of CIL receipts in areas with an adopted neighbourhood plan at this stage.

In any case, where a 25 per cent CIL revenue is received by a Parish or Town Council we would encourage joint working with Stroud District in order to ensure that, where appropriate, monies are spent on key infrastructure.

## 4 Alternative Funding & Funding Gap Analysis

---

### 4.1 Education

The IDP identifies an infrastructure cost of £16.7m based upon the benchmarks provided by Gloucestershire County Council Education.

Funding for education infrastructure improvements is limited to planning obligations and the Basic Need capital allocation. The latter is targeted to provide additional places where required linked to growth, but is also required for essential maintenance, i.e. boilers, roofs and windows.

This allocation of funding is as follows, for the whole of Gloucestershire:

- 2016-17 - £11,308,567
- 2017-18 - £3,812,358
- 2018-19 - £20,922,739

This county-wide basic need allocation is dependent on growth. As such GCC Education assesses where the funding should be allocated to provide additional places both on a temporary and permanent basis.

As this allocation of funding is thinly spread across schools in Gloucestershire, it can be assumed that CIL will still act as the main source of funding when delivering new school places.

### 4.2 Healthcare

£1,866,899 is required to support improvements to healthcare infrastructure to cope with changes in demand associated with housing growth.

Gloucestershire Clinical Commissioning Group's 'Primary Care Infrastructure Plan 2016-2021) identifies a need to replace the existing Beeches Green surgery and the existing Minchinhampton surgery at a cost of £3.36m and £1.55m respectively. These will be mostly funded by NHS England and the CCG or as private investment.

The cost of £1,866,899 is required to make improvements to existing and new surgeries to respond to increases in population related to housing growth.

### 4.3 Transport

The IDP identifies a requirement to deliver £3,544,744 worth of transport improvements to mitigate the impacts of development in Stroud District.

Transport costs are calculated from the Atkins technical note and the Stroud IDP refresh 2015 estimates for bus services and walking and cycling.

All strategic highways improvements will be funded through Section 106 Agreements on Site Allocations as set out in the Atkins technical note.

It is anticipated that a range of funding sources will be required to deliver the projects identified and costed in the IDP.

Gloucestershire County Council has no capital funding allocated to deliver the schemes identified, placing the burden of funding upon planning obligations.

In addition to planning obligations such as CIL, the main capital fund available for transport schemes in Gloucestershire is the Local Growth Fund (Growth Deal). Three transport projects have been identified in the Growth Deal; £1.2m for improved access to Berkeley and £4.4m for A419 Corridor improvements and £2m for improvements to the A38 Berkeley Bridges.

The 2015 IDP identifies £12.6m and £350,000 of sustainable transport improvements required to support the growth set out in the Stroud Local Plan. Apportioned across the windfall development using a cost per dwelling of £1,647.06 and £45.75, these total approximately £10.7m.

Adhoc bidding opportunities include the Access Fund (a continuation of the Local Sustainable Transport Fund) and Highways England bids for capital funding to improve the Strategic Road Network as part of the Road Investment Strategy (RIS) process.

## 4.4 Flood Risk and Water Management

Gloucestershire County Council Local Flood Risk Team has identified a prioritised project to protect properties on Slad Road from the Slad Brook by making improvements to the watercourse and constructing a sealed pipe drainage system from Folly Lane to the Slad Brook Culvert. The cost of this project is estimated at £1,000,000.

Public sector funding is required to meet a funding gap created by abnormally high infrastructure costs at Brinscombe Port. An estimated £11m of site enabling and civil engineering works are required against anticipated sale of development plots that may generate only £7m. Consequently approximately £3.5-5m of grant funding is required, £1.5m of which is being sought from the Single Local Growth Fund.

## 4.5 Summary of infrastructure funding, costs and shortfall

The table below demonstrates the known and anticipated sources of funding, the total estimated capital costs across the period 2016-2031, and the subsequent funding shortfall that exists to deliver the education, healthcare, transport and flood risk management infrastructure required to support the growth within the Stroud District Local Plan.

**Figure 5 - Infrastructure Funding Gap**

	Amount (£)
<b>Known funding sources</b>	
CCG / NHS / Private practice	£4,190,000
Growth Deal	£8,700,000
<b>Anticipated funding sources</b>	
CIL Funding	£12,141,120
<b>Total known / anticipated funding</b>	
<b>Estimated costs</b>	
Estimated Capital Cost for education	£16,970,000
Estimated Capital Cost for healthcare	£6,776,899
Estimated Capital Cost for transport	£10,744,744
Estimated Capital Cost for flood risk management	£6,000,000
<b>Total Estimated Capital Cost</b>	<b>£40,491,643</b>
<b>Estimated funding shortfall</b>	<b>£15,460,523</b>

Figure 5 indicates that the anticipated funding falls short of the assessed infrastructure costs associated with the windfall growth set out in the Stroud District Local Plan by **£15,460,523**.