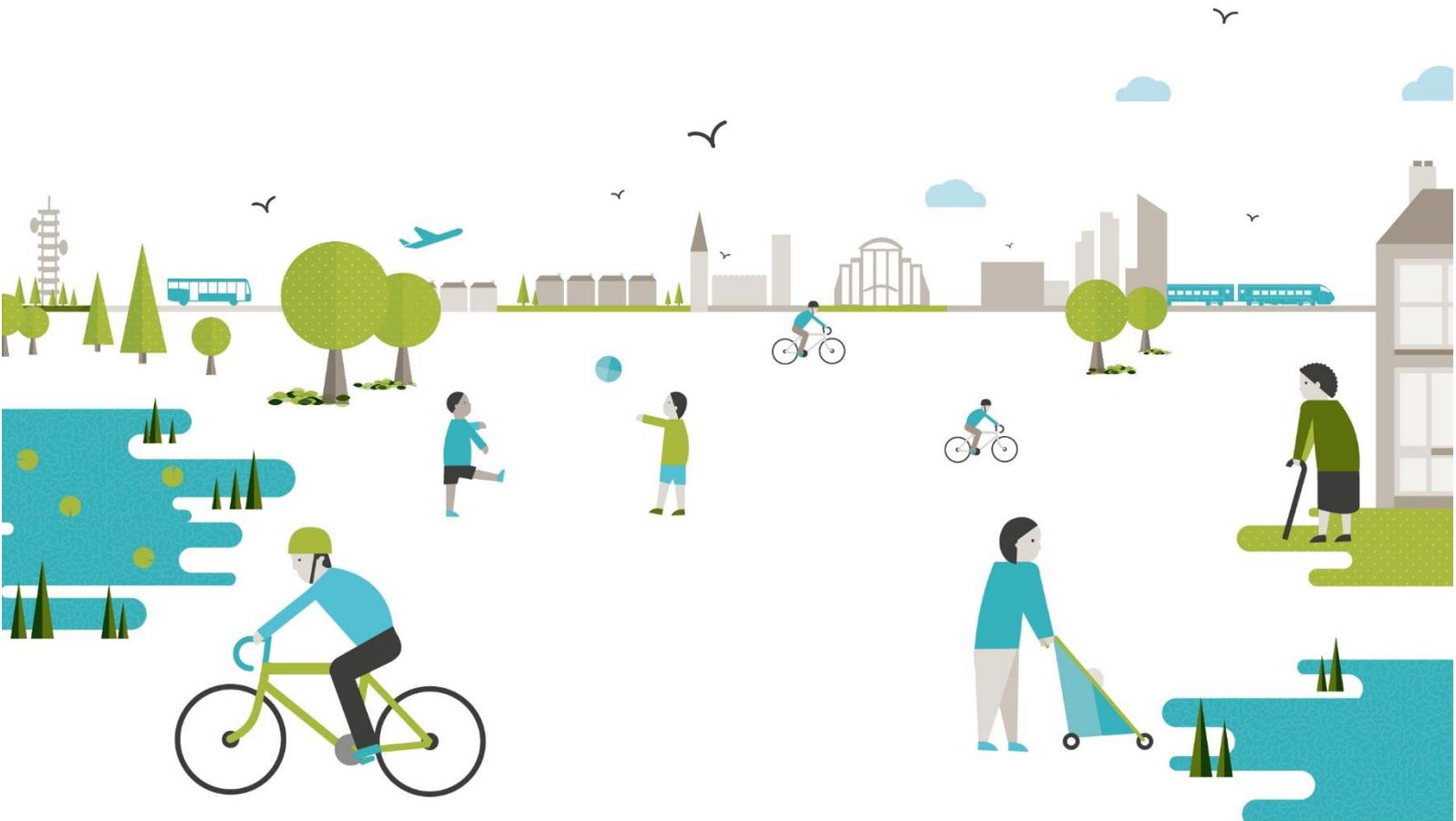


Joint Spatial Plan Infrastructure Position Statement

November 2015



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1.0 Introduction

- 1.1 The four West of England (WoE) unitary authorities comprising Bath and North East Somerset Council, Bristol City Council, North Somerset Council and South Gloucestershire Council (the Councils) are working in partnership towards the production of a Joint Spatial Plan. This will identify the level of growth required within the Bristol housing market area during the period 2016 to 2036 and its broad spatial distribution across the sub-region.
- 1.2 The first stage in this process is the preparation of the Issues and Options document for consultation. This will set out the scale of the housing and employment challenge and describe the key issues and choices.
- 1.3 The Issues and Options Stage will inform the First Draft Joint Spatial Plan, which is due to be published in Summer 2016.

2.0 Infrastructure Position Statement – scope and structure

- 2.1 This Infrastructure Position Statement (IPS) has been produced to support the Joint Spatial Plan – Issues and Options document. To date initial discussions have taken place with utility, education and health providers. Transport, green infrastructure and flooding issues are dealt with separately.
- 2.2 The IPS thus summarises the strategic infrastructure required to support “planned for” growth across the WoE (to 2027), as identified in the Councils’ Core Strategies. This provides the baseline position in respect of infrastructure delivery. It also provides a commentary on the issues surrounding the delivery of strategic infrastructure to support the development typologies set out in the Issues and Options document, based on findings from initial discussions with providers.
- 2.3 The IPS is structured as follows:
 1. National Planning Policy context
 2. Summary of recent and committed infrastructure provision
 3. Table of current level of “planned for” growth;
 4. Summary of development strategy and key infrastructure by Council area
 5. Commentary of the broad infrastructure implications of the development typologies identified in the Joint Spatial Plan – Issues and Options document.
 6. Explanation of how viability testing will feed into infrastructure planning to support the First Draft Joint Spatial Plan stage
 7. Explanation of the Infrastructure Schedule
 8. Appendices

3.0 National Planning Policy context

3.1 Infrastructure planning is an integral part of the Local Plan process and National Planning Policy Framework (NPPF) paragraph 157 states:

Crucially, Local Plans should:

- *plan positively for the development and infrastructure required in the area...*

The NPPF paragraph 162, also states that Local Authorities should work with other authorities and providers to:

- *Assess the quality and capacity of infrastructure for transport, water supply, wastewater and its treatment, energy (including heat), telecommunications, utilities, waste, health, social care, education, flood risk and coastal change management, and its ability to meet forecast demands; and*
- *Take account of the need for strategic infrastructure including nationally significant infrastructure within their areas.*

3.2 Each stage of the Joint Spatial Plan will be accompanied by a supporting infrastructure planning document in order to identify the strategic infrastructure requirements required to support the growth options. From the First Draft Joint Spatial Plan stage onwards, viability testing will be included to assess the viability of the growth options when taking account of the strategic infrastructure required to support them. This approach is in accordance with the requirements of the NPPF.

4.0 Recent & committed infrastructure provision

4.1 In recent years, significant investment has been made in infrastructure in the WoE sub region to support growth. This has included:

- Greater Bristol Bus Network;
- M4/M5 Smart Motorway Scheme;
- Weston Package Major Transport Scheme.
- Bath Package Major Transport Scheme
- M5 Junctions 19 & 21 improvements.
- Weston Villages Strategic Flood Solution.
- Capital improvements to Bath Spa Railway Station
- Hayes Way link road from Filton to Patchway;
- Significant walking and cycling investment through the Local Sustainable Transport & Cycle Ambition Funds;
- New Police Station and custody suites at Filton and Keynsham
- Southmead Hospital;
- Festival Way cycle route from Bristol to Nailsea;
- Two Tunnels cycle route from Bath to Midford
- Romney Avenue bus link (Filton);
- Re-build, refurbishment and / or extension of secondary schools at Filton, Winterbourne, Ashton Park, St. Mary Redcliffe, St. Bedes. St. Bernadettes, Cotham;
- Colston Hall extension

4.2 In addition, significant regional infrastructure improvements are also now committed and being delivered, such as:

- Metrobus Project (including Ashton Vale to Temple Meads & North Fringe to Hengrove routes, South Bristol Link Road, Stoke Gifford Bypass and M32 park & ride site)
- MetroWest rail project.
- Electrification of the Great Western Main line from London to Swansea (Network Rail);
- New nuclear power plant at Hinkley Point and pylon connection project (National Grid)
- Bristol Arena;
- New pipe, pumping and storage infrastructure in Weston, Cheddar, Banwell and Rowberrow Hill (Bristol Water)
- New Paulton – Midsomer Norton – Marksbury main (Bristol Water)
- New Strategic Sewers (Frome Valley & Trym Relief Sewers) (Wessex Water)
- North Somerset Enterprise & Technology College (NSETC).
- New Waste & SORT IT centre (Bristol North Fringe)

- New Deep Sea Terminal (Avon Docks)
- Cribbs – Emersons Green Cycle Trunk Route
- New Fire Station (Keynsham)
- New M49 Jct to serve Avonmouth & Severnside Enterprise Area
- Avon & Severnside Flood Defence Scheme
- Superfast Broadband Project (WoE & BDUK)
- UWE regeneration & Bus Interchange.

5.0 Current level of planned housing growth

5.1 Each of the WoE Council's has an adopted Core Strategy which identifies a planned level of housing growth. This is set summarised in the following table.

Council	Core Strategy Adoption Date	Plan Period	Plan Policy	Planned Housing Number
Bath and North East Somerset	July 2014	Up to 2029	DW1	12,960
Bristol	June 2011	Up to 2026	BCS5	26,400
North Somerset	(see below)	Up to 2026	CS13	20,985
South Gloucestershire	December 2013	Up to 2027	CS15	28,550
Total				93,095

Bath and North East Somerset

5.1 Bath and North East Somerset adopted its Core Strategy in July 2014. The Core Strategy has a requirement to deliver 12,960 dwellings between 2011 and 2029. To date some 2,154 dwellings have been provided.

5.2 The strategy adopted in the Core Strategy is to steer growth primarily to brownfield land in the urban areas of Bath, Keynsham and the larger settlements in the Somer Valley. However, in order to meet the housing requirement and facilitate economic growth in accordance with the objectives of the Core Strategy, some greenfield land is also required, including some sites released from the Green Belt as strategic site allocations at Bath, Keynsham and Whitchurch. The identification of land for development has sought to minimise the impact on the environment and the harm to the Green Belt, as well as taking account of infrastructure requirements.

5.3 Bath also contains an Enterprise Area which runs along the River Avon corridor and presents a key opportunity for delivering many of the districts development aspirations.

- 5.4 The B&NES Core Strategy (July 2014) and supporting Infrastructure Delivery Programme (updated 2014) can be found at the following weblinks:

<http://www.bathnes.gov.uk/services/planning-and-building-control/planning-policy/core-strategy-examination>

http://www.bathnes.gov.uk/sites/default/files/sitedocuments/Planning-and-Building-Control/Planning-Policy/Evidence-Base/Infrastructure/draft_idp_2014.pdf

- 5.5 Key infrastructure schemes to support Bath and North East Somerset's planned growth include:

- Metrowest Phase 1 (Bath Spa to Severn Beach)
- Great Western Mainline Electrification
- Greater Bristol Bus Network
- Bath Package Major Transport Scheme
- New / extended primary schools
- Bath RUH Hospital capital programme
- Decommissioning of Gas Holder at Bath Western Riverside & replacement of storage capacity
- Improvements to Flood Defences of Bath City Centre and Riverside Corridor

Bristol

- 5.6 Bristol adopted its Core Strategy in June 2011. The Core Strategy has a requirement to deliver 26,400 dwellings between 2006 and 2026. To date 16,347 dwellings have been provided. Due to its tightly constrained boundaries and urban context, there are no strategic development sites in Bristol. Growth is planned on a range of sites dispersed across the city with emphasis placed on the City Centre and South Bristol. Consequently, growth in Bristol has an incremental impact on existing infrastructure, and it is rare that an individual development will, of itself, justify the provision of new infrastructure such as a school or district centre.
- 5.7 Bristol also contains the Temple Quay Enterprise Zone which has an emphasis on employment led mixed use development.
- 5.8 The Bristol Core Strategy (June 2011) and Supporting Infrastructure Delivery Programme (June 2010 – updated February 2012) can be found at the following weblinks:

<http://www.bristol.gov.uk/page/planning-and-building-regulations/bristol-local-plan>

<http://www.bristol.gov.uk/page/planning-and-building-regulations/planning-evidence-documents#jump-link-10>

5.9 Key infrastructure schemes to support Bristol's planned growth include:

- Metrobus (North Fringe to Hengrove);
- Metrobus (South Bristol Link);
- Metrobus (Ashton Vale to Temple Meads);
- Metrowest Phase 1 (reopening of the Portishead Rail Line)
- Remodelling of Temple Circus

5.10 Local infrastructure schemes such as the provision of increased capacity to existing primary schools, and improvements to green infrastructure are also being delivered to support growth across Bristol.

North Somerset

5.11 North Somerset's Core Strategy was adopted on 10 April 2012. Following a legal challenge policy CS13 (scale of new housing) was remitted back to the Planning Inspectorate for re-examination. This policy had identified a need for a minimum of 14,000 new dwellings. The judgment also required eight other policies to be remitted as any change to the housing requirement may have consequences for these other policies. With the exception of these nine policies the plan remains adopted.

5.12 The examination of the remitted policies commenced with the consideration of the overall housing requirement (CS13). The Inspector's Report was received in March 2015. This recommended that the housing target is 20,985 dwellings for the period 2006 to 2026. The Secretary of State subsequently intervened in the process and has recently confirmed the housing target as being 20,985 dwellings.

5.13 The key strategic development area for both housing and employment in North Somerset is the Junction 21 Enterprise Area / Weston Villages. This area will deliver up to 6,450 homes and 10,000 jobs over the period to 2026. The sites require an extensive package of infrastructure including the £17m Weston Villages Strategic Flood Solution; £14m Cross Airfield Link; £10m North South Link; the North Somerset Enterprise & Technology College (NSETC); five new primary schools; secondary school places; a health practice; and a range of community and green infrastructure. Much of this infrastructure is now complete or committed and development on the sites is coming forward.

5.14 Other areas of Weston are expected to deliver a further 3,500 dwellings. A significant proportion of this is forecast to come forward in the town centre and work is currently underway to update infrastructure requirements relating to this growth.

5.15 Further information on the Core Strategy can be found at:

http://www.n-somerset.gov.uk/Environment/Planning_policy_and-research/localplanning/Pages/Core-Strategy.aspx

5.16 The Core Strategy Infrastructure Delivery Plan (which remains fully extant) can be viewed at:

[http://www.n-somerset.gov.uk/Environment/Planning_policy_and-research/researchandmonitoring/Documents/infrastructure%20delivery%20plan%20\(pdf\).pdf](http://www.n-somerset.gov.uk/Environment/Planning_policy_and-research/researchandmonitoring/Documents/infrastructure%20delivery%20plan%20(pdf).pdf)

5.17 Key infrastructure schemes in addition to those identified above include the following:

- South Bristol Link Road.
- Ashton Vale – Temple Meads metrobus.
- Metrowest Phase 1 (Portishead rail).
- M5 Junction 21 phase 2a improvements.
- Superfast broadband capacity.

South Gloucestershire

5.18 South Gloucestershire adopted its Core Strategy in December 2013. The Core Strategy has a requirement to deliver 28,355 dwellings between 2006 and 2027. To date approximately 8,200 dwellings have been provided. The majority of growth is planned within the Bristol North and East Fringes on a series of strategic development sites at Cribbs Patchway, Harry Stoke and Emersons Green East. Additional strategic sites are being developed at North Yate and North Thornbury.

5.19 South Gloucestershire also has three Enterprise Areas at Avonmouth Severnside, Cribbs Patchway / Filton and Emerson Green East.

5.20 The South Gloucestershire Core Strategy (December 2013) and supporting Infrastructure Delivery Plan (March 2014) can be found at the following weblinks:

<https://www.southglos.gov.uk/environment-and-planning/planning/planning-local-plans/core-strategy-2006-2027/>

<http://www.southglos.gov.uk/environment-and-planning/planning/planning-local-plans/local-development-framework/infrastructure-delivery-plan/>

5.21 Key infrastructure schemes to support South Gloucestershire's planned growth include:

- Metrobus (North Fringe to Hengrove) which includes a spur to Emersons Green and an extension to Parkway Station;
- MetroWest Phase II which includes 2 new stations at Henbury and Filton serving the Cribbs Patchway New Neighbourhood and Enterprise Area;
- New M49 Junction, flood defences and mitigation measures to serve the Avonmouth Severnside Enterprise Area;
- New strategic sewers between Yate and Bradley Stoke and along the Trym river corridor;
- New Secondary Schools planned at Emersons Green East and Cribbs Patchway New Neighbourhood;
- Cycle Trunk Route from Cribbs Patchway to Emersons Green;
- New Waste Transfer and SORT IT centre to serve the North Fringe communities; and
- Redevelopment of the UWE campus, including a new bus interchange.

5.22 The strategic residential growth sites will also include new primary schools and a range of social, community and green infrastructure to support new and existing communities.

6.0 Statutory Infrastructure Providers

6.1 Input has been sought from external statutory infrastructure providers to ascertain the likely impact of various development typologies on key infrastructure such as water and power provision, and health.

6.2 Appendices A & B contain position summaries of the following infrastructure providers:

- Wessex Water
- Bristol Water
- Western Power Distribution
- Wales and West Utilities
- NHS England

6.3 Input has also been sought from the WoE Local Education Authorities, all of who have confirmed that additional schools will be likely to be required to support growth beyond that planned for in the current core strategies. A paper identifying the current position and how new education infrastructure is delivered to support growth is attached at Appendix B.

7.0 Infrastructure implications of JSP Issues and Options development typologies

- 7.1 With respect to the locational options the following general themes have emerged in discussions with infrastructure providers. These are set out below. They do not necessarily reflect the position of the 4UAs or should be taken to imply preference for any one locational typology over the others.
- 7.2 **Urban intensification** would, in general, benefit from access to existing infrastructure, particularly where additional capacity exists. However, there could also be cumulative impacts that require mitigation. Building on previously developed brownfield land and retrofitting to existing infrastructure in constrained urban areas can also be logistically difficult and costly when compared with greenfield development. With such piecemeal approach, i.e. reliance on a large number of small-sites, infrastructure delivery would require effective strategies for realising and distributing uplift in land value through mechanisms such as Section 106 and Community Infrastructure Levy from new development to mitigate the impacts by addressing infrastructure deficits. The ability to realise such developer contributions may however be affected by higher development costs associated with land remediation and lower sales values. More effective strategies to realise additional public funding may therefore be required.
- 7.3 **Urban extensions** will vary, based on their location in relation to existing infrastructure and established urban areas, but being larger and usually greenfield in nature can benefit from economies of scale and viably deliver most of the infrastructure needs generated by the new population e.g. new schools, community buildings & public open space etc. Longer planning lead in times can also enable infrastructure providers to plan more effectively to meet needs, but due to significant infrastructure requirements early in the build process, such as large scale land remodelling, provision of new distributor roads, offsite highway works and service connections, these can all challenge viability in the short-term. Mechanisms to pump prime and or deliver infrastructure earlier in the development process may therefore be required.
- 7.4 **Town expansions** will also differ depending upon the scale and location of development. Assuming however, that town expansions are on greenfield sites and not of the scale of urban extensions, they are likely to be relatively less challenged in terms of on-site and up-front infrastructure costs and requirements, but lead to more impact on existing infrastructure and services in the respective towns. Effective strategies for realising and distributing uplift in land value through mechanisms such as Section 106 and Community Infrastructure Levy from new development become critical to mitigate the impacts by addressing infrastructure deficits.

7.5 **New settlements** would start from a very limited base in terms of infrastructure. They would be required to create sufficient critical mass to justify significant investment in new infrastructure improvements. Like urban extensions they would require long lead in times and be challenged viability wise in the short-medium term. They would also be heavily reliant on nearby existing settlements and urban areas in terms of access to services until sufficient critical mass had been built up to support such provision within the new settlement. In the long-term however they may provide more efficient ways of providing modern more efficient and sustainable service provision.

7.6 **Dispersed Growth.** The impact of small scale development on infrastructure across a wide range of settlements will greatly vary depending on location and amount. Some such development in the right locations can be useful in supporting local shops and facilities, but its dispersed nature can also put pressure on existing services and utilities by requiring the enhancement of services & extension of networks but without sufficient critical mass to warrant or pay for such improvements and / or significant 'upstream' investment. Again effective strategies for realising and distributing uplift in land value through mechanisms such as Section 106 and Community Infrastructure Levy from new development become critical to mitigate the impacts by addressing infrastructure deficits.

8.0 Economic Viability

8.1 Paragraphs 173 and 174 of the NPPF require that plans are deliverable and therefore careful attention must be paid to development viability and the cumulative costs of Local Plan policy requirements. Consequently, suitably qualified consultants will be appointed to provide viability advice and evidence on emerging and final growth options. The commission will:

- Consider the appropriate methodology to use in undertaking viability appraisals;
- Review existing viability information held by the Councils. and other appropriate sources;
- Provide a summary of viability issues in different parts of the sub-region and provide commentary on the various viability challenges of different development typologies
- Undertake viability assessments to inform and support a range of emerging growth (homes and employment) options, and inform choices in the development of the final submission plan; and
- Undertake more detailed site viability assessments and sensitivity testing of the preferred strategy (submission plan) to inform further plan making and ensure deliverability.

8.0 Infrastructure Schedules

- 8.2 The principle purpose of infrastructure planning is to improve transparency and communication between infrastructure providers and local planning authorities to ensure the infrastructure implications of growth are better understood and costed to improve plan making, delivery and ultimately outcomes. The 4 UAs currently maintain infrastructure schedules (infrastructure delivery plans) of schemes to support growth. A schedule of new schemes required to support JSP growth will be provided to support the Joint Spatial Plan as they are identified.

APPENDIX A – Utility Company Summaries

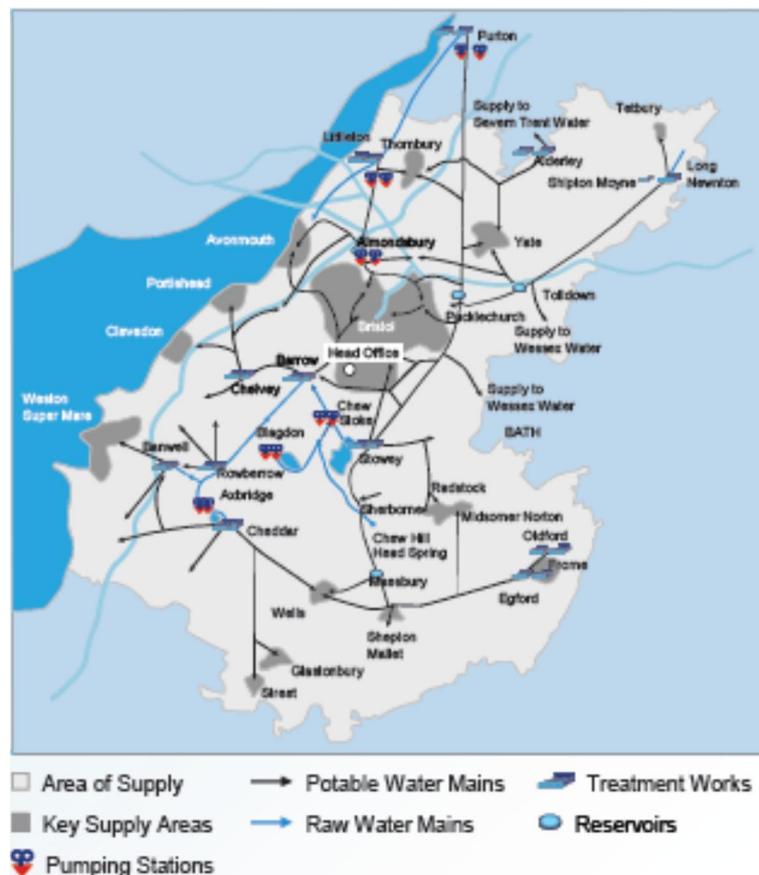
Bristol Water

Bristol Water supplies drinking water to the majority of the West of England area. Investment during 2010-2015 included a new water main in north Bristol and additional storage at Banwell and Hutton reservoirs designed to meet growth planned in the north fringe and at Weston to 2035 by providing extra flexibility in deployment of available water.

The current Bristol Water Business Plan (2015-2020) is awaiting approval from Ofwat. This is designed to provide capacity identified as being required in their Water Resource Management Plan (2015-2040), which takes into account and extrapolates the growth identified in the Core Strategies of each authority. Key strategic infrastructure items within the plan include new pipe, pumping and storage infrastructure in the Weston, Cheddar, Banwell and Rowberrow Hill area; new Paulton / Midsomer Norton / Marksbury water main; and additional resilience measures. This includes transferring some of the spare capacity from Wessex Water.

Bristol Water commented that they do not see any strategic issues arising with respect to water supply. However, in general they advised that brownfield regeneration is not considered to be a major problem as the network is usually already in place; greenfield development is the most costly option as it extends the network; and larger scale development provides greater opportunity to deliver strategic improvements to the network.

Bristol Water Supply Area



Wessex Water

Around £1 billion was invested in infrastructure improvements during 2010-2015 in both water supply and sewerage measures. Wessex Water treats and supplies 270 million litres of water a day to 1.3 million customers, including the parts of the West of England that are not served by Bristol Water (including parts of South Gloucestershire, North Somerset and the city of Bath). They have 200 water sources and water treatment works, 200 booster pumping stations, 340 service reservoirs and water towers, and 11,600km of water mains. The Wessex Water Resource Management Plan projects a significant surplus of resources over demands. The current water supply grid project will ensure continuity of water supply by giving Wessex the ability to redistribute surplus water to where it is needed throughout their water supply area. Wessex Water also treats 460 million litres of sewage from 2.7 million customers every day, which includes the whole of the West of England area. They have 35,000km of sewers, 407 sewage treatment works and 1,600 sewage pumping stations.

Key pieces of infrastructure within the current Wessex Water Business Plan include phase 3 of the Frome Valley Relief Sewer and Trym Relief Sewer, which are designed to deliver capacity to serve growth currently planned in Yate and north and east of Bristol.

Business planning for the 2020-25 period will commence in 2016/17. The JSP will inform those plans. Wessex Water commented that they do not see any strategic issues arising with respect to water supply or waste water; however they advised generally that brownfield regeneration is usually not considered a major problem as the network is already in place; greenfield development is most costly as it means extending the current network; larger scale development provides greater opportunity to deliver strategic improvements to the network; and showstoppers may include upgrades to the existing network where aging infrastructure falls within designations such as SSSI's.

Wessex Water Supply Grid Project



Outcome of initial meetings with Bristol and Wessex Water (May 2015)

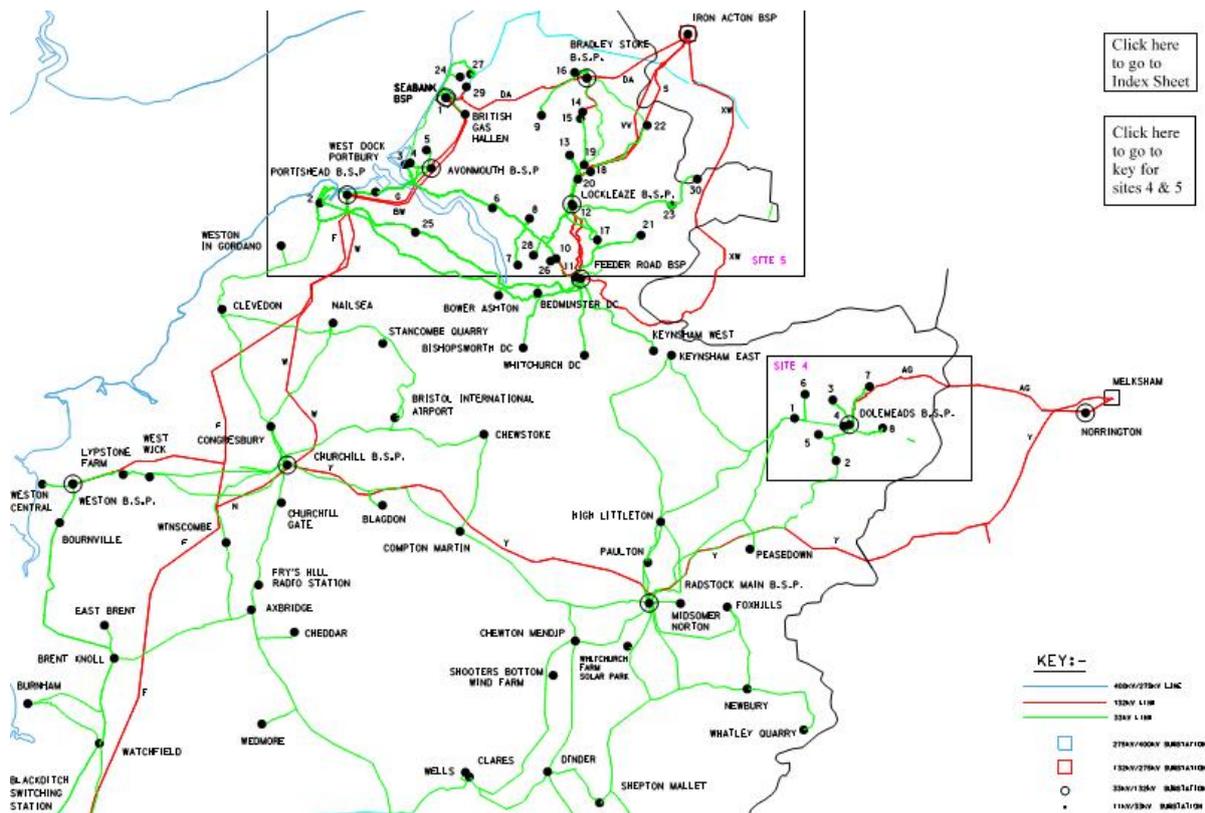
- Brownfield regeneration (depending on size and demand) is not considered a major problem as the network is usually already in place. Redevelopment replaces existing uses etc.
- Greenfield development is most costly as it 'extends' the network.
- Unplanned, piecemeal development is problematic given the inability to foresee such growth and make provision.
- Larger 'new settlement' scale development provides greater opportunity to deliver strategic improvements to the network.
- Showstoppers may include upgrades to the existing network where ageing infrastructure now falls within new designations such as SSSI's.
- It would be advantageous to consider growth beyond 2036 in planning for strategic infrastructure.
- BW & WW require further information in terms of growth options to enable 'modelling' of impacts, in order to advise re mitigation required.

Western Power Distribution

Western Power Distribution controls the 132k and below network (the 275k and 400k being controlled by the National Grid). The South West area comprises 1.5 million customers, 22,000km of underground cables, 28,000km of overhead cables, and covers an area of 14,400skm. Most of the West of England falls within this area; however Yate and Thornbury are located within the Western Power Distribution Midlands area.

The Western Power Distribution Business Plan runs from 2015-2023 and provides for strategic improvement schemes and general reinforcement of the network. Core Strategy areas of growth are planned for and serviceable. A total of £1.5 billion will be invested by Western Power Generation into the network.

Western Power Distribution do not foresee any strategic issues arising with respect to electricity transmission. In general, developments under 1,000 dwellings are serviceable off the local 11kv network; larger developments can require upgrade to the 33kv network which is more costly; it is generally easier to reinforce existing network to support brownfield development than extend the network to serve new large scale greenfield sites; re-routing or undergrounding pylons is a significant expense; larger 'new settlement' scale development provides greater opportunity to deliver strategic improvements to the network; renewables (solar farms / wind turbines) present challenges, due to the intermittent nature and 'feed-in' implications they require backup systems and reinforcement to the network.

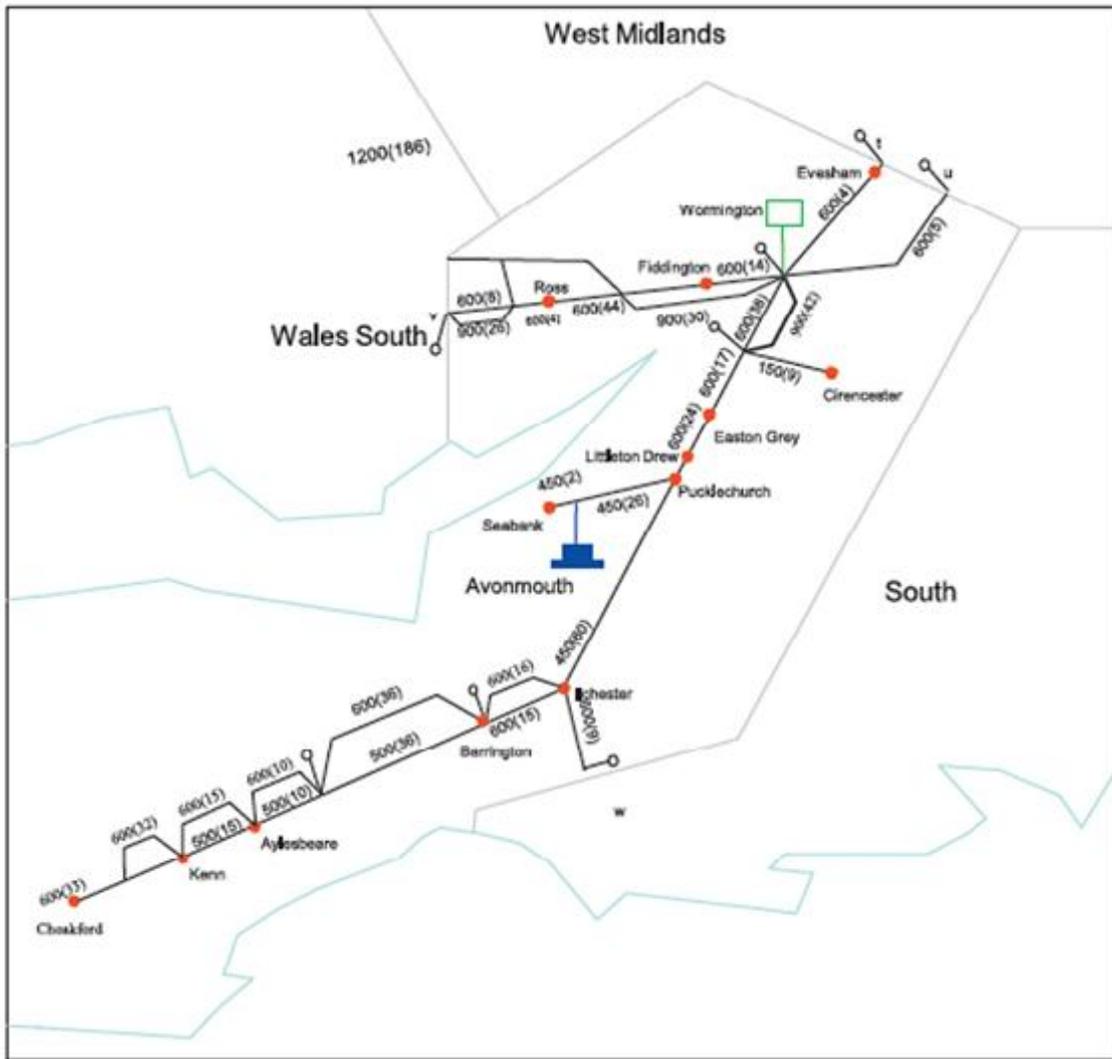


West of England network

Wales and West Utilities

The Wales & West Utilities (WWU) south west local distribution zone gas network is supplied through 13 National Transmission System (NTS) Offtakes and two non-NTS feeds. WWU take responsibility for new connections to their network, but are only obliged to provide these where it is economic; hence there is often limited gas infrastructure in more rural areas. WWU are required to “maintain an efficient and economical pipeline system” under the Gas Act 1986. The WWU Long Term Development Statement guides new investment in the gas distribution network for the next 10 years based on estimated growth in the market. These plans, which may include replacement or reinforcement projects, are subject to change as and when the need arises. WWU will continue to develop and invest in the Distribution Network in order to operate a safe and efficient network and to meet customers’ requirements for any growth that is forecast.

Wales & West Utilities forecast that annual demand is expected to decrease gradually by a total reduction of 3.1% over the 10 year horizon of the Long Term Development Statement. They forecast that peak day demand for the network will remain flat from 2014/15 to 2023/24. This in turn does not lead to any strategic investment requirements. However, they will continue to develop and invest in the Distribution Network in order to operate a safe and efficient network and to meet customers’ requirements for any growth that is forecast.



South West National Transmission System

Outcome of initial meeting with Western Power Distribution and Wales and West Utilities

WPD do not foresee any strategic/showstopper issues arising with respect electricity transmission. It is not possible to provide a definitive answer in respect of where growth should be avoided / will incur such significant infrastructure costs as to threaten viability.

- Smallscale (<1000 dwellings) development is generally serviceable off the local 11kv network. Larger developments can require upgrade to 33kv network which is more costly.
- Type of housing is critical, i.e. gas heated dwellings generally require 2kw per unit, whereas electrically heated require 8kw per unit. High rise (4+storey) usually electrically heated.
- Easier to reinforce existing network to support brownfield development than extend network to serve new large scale greenfield sites. This really does depend on location of the development and what WPD assets are in the area.
- Re-routing, undergrounding pylons is significant expense, £ 0.2 - 0.3m approx. per pylon for diversion, approx. 4/5 times the cost for undergrounding (including up to 20m wide easement). Extinguishing easements are at cost of the developer. Extinguishing wayleaves is usually negotiated to avoid court proceedings, i.e. cost is often shared between developer, WPD.
- Primary sub stations can be 20x30m in dimension.
- Unplanned, piecemeal development at the edge of the network is problematic given the inability to foresee such growth and make provision.
- Larger 'new settlement' scale development provides greater opportunity to deliver strategic improvements to the network.
- It would be advantageous to consider growth beyond 2036 in planning for strategic infrastructure.
- Renewables (solar farms / wind turbines) present challenges. Intermittent nature and 'feed-in' implications requires backup systems and reinforcement to the network.
- The southwest (south of Bristol) now has 3-6yr delay on ability to connect further renewables into the system due to need for strategic upgrade to the transmission network.

WWU do not foresee any strategic issues arising with respect gas supply. Developer contributions are based on an economic test that considers cost and proportionality of the reinforcement. WWU can quickly provide a view on reinforcement works required to connect new development. It is not possible to provide a definitive answer in respect of where growth should be avoided / will incur such significant infrastructure costs as to threaten viability.

- Diversion and laying of new high pressure mains approximately £1m / km depending on complexity.
- Brownfield regeneration is not considered a major problem as the network is usually already in place. Redevelopment replaces existing uses etc.
- Greenfield development is most costly as it 'extends' the network.
- Unplanned, piecemeal development at the edge of the network is problematic given the inability to foresee such growth and make provision.
- Larger 'new settlement' scale development provides greater opportunity to deliver strategic improvements to the network.
- It would be advantageous to consider growth beyond 2036 in planning for strategic infrastructure.
- Major industrial uses (such as Gas fired Power Station at Severnside) present greatest challenge in terms of supply.
- WWU require further information in terms of growth options to enable 'modelling' of impacts, in order to advise re reinforcement required. WWU provided link to network plan.

Appendix B – NHS England & LEA Position Statements

NHS England – Position Statement

Introduction

NHS England South, South West team welcomes the opportunity to comment on the Joint Spatial Plan. The comments in this response should be used by the Planning Authorities to relate to Infrastructure requirements for NHS England to ensure access for residents of new developments to local health services is secured.

NHS England commissioning responsibility

NHS England has a duty to commission local healthcare services to meet the expected needs of the population including the demands of the additional population of the new development. The NHS structure within England changed on the 1 April 2013 with the enactment of the Health and Social Care Act (2012). This change principally created NHS Commissioning Board, known as NHS England, replacing the Primary Care Commissioning function previously undertaken by the Primary Care Trusts.

Increasingly Clinical Commissioning Groups in Bristol, North Somerset, Somerset and South Gloucestershire are working together to commission primary care services. NHS England and Clinical Commissioning Groups in Bristol, North Somerset, Somerset and South Gloucestershire are developing Local Estates Strategies planned for completion in December 2015.

The Local Estates Strategy will cover primary and community health care service strategies and the estates needed to achieve those strategies. The Local Estates Strategy will consider the impacts for housing and population growth in the South West Joint Spatial Plan and will:

- articulate the commissioner's visions for the estate, based on the Five Year Forward View (5YFV) and commissioning plans;
- assimilate core information about the current estate in the area;
- identify the current and planned broad locations for the delivery of services in the area;
- identify what, if any, further data is required to inform the strategy and the plan to gather that data;
- outline the opportunities that exist within the properties in the area to meet the requirement for the delivery of services; and
- identify a high level next steps plan, acknowledging the drivers for change, both within the service and within the estate itself.

This strategy will inform NHS England's and CCG's responses to Infrastructure requirements e.g. in respect of new communities and new housing developments within the WoE.

Nature of General Practice

Primary Care services account for around 90% of the public's contact with the NHS and can significantly improve the health of the local population, identifying and managing chronic disease and illness, and reduce reliance on hospital care. Primary Care needs to sit at the heart of communities, supported by community and social care services. NHS England's and CCG's vision is to make an increasing percentage of care available close to people's homes and to deliver more services in primary care and community settings, whilst reducing unnecessary reliance on hospital care. This will support the delivery of productivity and efficiency savings in secondary care, but will also make additional demands on primary care providers in terms of both direct service provision and in playing a more active role in managing local resources (for example developing and regularly reviewing care plans to reduce the risk of vulnerable people being admitted to hospital for preventable illness).

The commissioning trend across the whole of England is towards larger practices employing more GPs or through federations of practices, together with the increasing co-location of Primary Care and other services. This is because larger practices have more capacity to provide increased services and the necessary infrastructure to ensure that quality standards are being met and that clinical staff can receive appropriate support and development.

In general larger practices are better able to provide a wider range of health services and support the systematic tracking and improving of the quality of care for patients with conditions such as asthma, diabetes and coronary heart disease, and for those with the most complex care needs in the community. By developing bigger practices, we can provide a wider range of services to patients and provide extended access to services in the evening and at weekends. Bigger practices are better able to work with partners to pursue areas of joint practice.

The development of new primary care estate must facilitate improvements in the range and quality of services offered in primary care. In particular it should enable GPs and their teams to play an even greater role in primary and secondary prevention of ill health, and to maintain and further improve the quality of services.

As a result it is unlikely new small stand-alone practices in the WoE would be commissioned with less than four GPs and preferably six GP practices as they would be probably unable to provide a wide range of high quality primary medical services.

Healthcare facilities for new development

Early NHS policy set a straightforward geographical criterion such that a GP is '*within walking distance for mothers with prams*'. The NHS still recommends that patients register with their local GP. New residents are able to choose which GP practice to register with but NHS England continues to consider the capacity of primary care by analysing the proportion of residents having access to a GP within 15 minute walk or travel by public transport is an appropriate measure of accessibility. At this stage of the JSP it is not possible to determine travel times for public transport or walking but NHS England would support the requirement for public transport and cycling/walking routes to be provided within and to new development areas to provide that accessibility.

For the purposes of overall planning, NHS England has published broad guidelines on the size of primary care premises related to the number of patients to be served. NHS England South, South West will use these guidelines to inform our eventual recommendations to the JSP.

Patients can register with a GP practice of their choice, as long as they live within its catchment area and it is accepting new patients. GP practices now agree their practice boundaries with NHS England. Practices can apply to NHS England if they have insufficient capacity to care for further patients close to their patient list. When the quantum and location of new development is known further analysis can be undertaken with respect to health infrastructure requirements.

Early provision of healthcare facilities

NHS England South, South West team would strongly endorse the need for healthcare facilities to be provided at the outset of the construction phase because it is important that there are healthcare facilities available before residents occupy their houses.

NHS England South, South West would support the potential for temporary provision and co-location in appropriate locations until the completion of the final facilities – provided that this was at no additional cost to NHS England and satisfied relevant CQC Regulations and appropriate standards for a new GP Practice.

Pharmaceutical services

Respective Pharmaceutical Needs Assessments (PNAs), provide overviews of pharmaceutical services provision. A pharmaceutical services provider can apply for a new pharmacy contract when a gap is identified within the PNA. Access to pharmaceutical services is anticipated to be available in (or adjacent to) areas where people access routine healthcare (GP surgeries) and/or major retail areas. These are considerations in planning access to pharmaceutical services for new communities, in addition to access to existing services. Thus, securing accessible pharmaceutical services within a new community may require the provision of premises within New Neighbourhoods. PNAs are reviewed every three years.

Dental services

Since 2006, patients are not registered with dentists and a dentist is only responsible for a patient's care whilst they are in a course of treatment. Although many practices do have their 'regular' patients, the commissioning of dental services differs somewhat from that of general practice. Dental needs are calculated on Units of Dental Activity, which relate to calculating the amount of dental time needed to provide a range of treatments eg an examination = 1 unit and a complex treatment conducted over a number of weeks might equal eg 12 units of activity or standard appointment slots. The usual planning assumption is 1 dentist per 2,400 patients. Under the terms of the dental commissioning guidance NHS England would have to carry out a tender process before awarding any new General Dental Services contract within any new area of need or increasing any existing contract.

Optometry services

As with dental services above, patients are not registered with an optometrist and an optometrist is only responsible for a patient's care in respect of assessing a patient's vision and eye health, issuing optical prescriptions and provision of optical vouchers for appliances such as spectacles and contact lenses. However, as with dental services, many optometrists do have their 'regular' patients.

NHS England has a responsibility to arrange for essential primary ophthalmic services i.e. NHS sight tests for those who are eligible. Furthermore, any suitable optometry provider is able to apply for a contract to provide NHS sight tests and there are no restrictions on the

number of contracts that may be awarded or the number of sight tests they may carry out. The current national contract with each existing optometry provider does not have a ceiling to contractor activity.

Thus, securing accessible optometry services may require the provision of optometry premises within new communities to ensure adequate accessibility to these services.

Conclusion

NHS England welcomes the opportunity to engage with the JSP. NHS England would expect additional development in the WoE up to 2036 to generate the need for additional healthcare services. NHS England and Clinical Commissioning Groups will continue to work with Local Authorities to provide healthcare to meet the needs of new communities and where agreements justified, via the Local Plan and development management process through mechanisms such as Community Infrastructure Levy and Section 106.

Local Education Authorities – Position Statement

How do West of England local authorities work to ensure educational infrastructure is in place to serve new development?

Local authorities are subject to a statutory duty to ensure adequate school places within their area. West of England local authority education officers work to ensure educational infrastructure is in place to serve new development in the following main ways:

- Through educational strategies such as School Organisational Plans or Commissioning Strategies.
- Through Core Strategy Infrastructure Delivery Plans and site allocation policies.
- In response to individual planning applications.
- As part of pupil projections / school capacity analyses prepared on an annual basis to enable forward-planning and submitted to the Department for Education.

The needs considered by education officers include early years' childcare and pre-school, primary, secondary, post-16, Special Educational Needs and Disabilities (SEND), and Children's Services. Provision for Further and Higher Education are dealt with through other organisations including the Skills Funding Agency.

The basic procedure in each of the authorities is the same:

- (i) Calculations are carried out to project the number of children that will arise as a result of development. The methodologies vary between authorities from a simple ratio such as 28 primary age children per 100 homes or may be more complex taking account of a range of factors such as housing type, size and build rates. They are likely to vary also dependent on the type of housing prevalent in each area (for example, there will be differences between family-based housing estates and high-density urban living). This has been identified as a potential area of future work, as a consistent approach across the four authorities would be of benefit.
- (ii) Assessments are carried out of capacity in existing schools and whether there are sufficient spare places in those schools to accommodate the pupil yields from new developments. These assessments are based on the school place forecasts published annually and submitted to DfE.
- (iii) If additional places are required, the officers will assess how best these can be provided. It may be possible for extra capacity to be created at existing schools, or entirely new provision may be required. Where this new provision relates to needs arising from development, developers will be expected to fund the works required, either through the Community Infrastructure Levy (CIL) or Section 106 planning obligations, dependent on the system in place for each authority.

National guidance is that only those schools that are graded by OfSTED as good or outstanding with outstanding leadership should be expanded. Any expansion is subject to negotiation with the school in question and in the case of Free Schools and Academies, the final decision on whether to expand will rest with the school.

Government requirements are that all new schools must be Free Schools.

Existing plans and capacity to deal with development

Each of the four authorities has assessed and planned education requirements in relation to identified Core Strategy growth through to 2026. These requirements are set out in the Core

Strategy Infrastructure Delivery Plans for each of the authorities, with further detail of methodologies provided in Development Contributions SPDs.

Feedback from each of the four authorities is that the provision of further capacity beyond 2026 to meet the needs of additional growth is likely to prove challenging, as capacity at existing schools will have been taken up by population growth to that point. In particular, the physical capacity of existing school sites is increasingly limited. Any further new places are likely to require the provision of new land and/or new schools, along with the necessary supporting infrastructure; this may increase the cost of new provision and a coordinated approach across landownerships will be needed in many cases.

Pressures and delivery issues vary across different educational services and age groups:

- Children's Centre Services: these do not necessarily require additional premises, if there are adequate community or other shared-use facilities in an area that can be used.
- Early years' childcare and pre-school: there is an increasing need for pre-school provision due to the national expansion in free childcare. Most provision is through the Private, Voluntary and Independent (PVI) sector. Shared-use community facilities are often used as a base for pre-schools, however as the sector expands there is likely to be pressure on the capacity of those facilities and a need for more bespoke provision.
- Primary schools: the primary age population has grown rapidly in recent years and a very significant number of schools across the West of England have already expanded to meet the need for new places. This means that in many areas the opportunities for further expansion are likely to be expensive – requiring a wholesale re-configuration of school sites – and / or will require additional land.
- Secondary schools: it is anticipated that the secondary sector will see significant growth in the near future and that expansions will be required. As with the primary age group, it is likely that by 2026 the number of 'easy' expansions remaining will be limited. Expansions to secondary schools are complicated by the need to increase specialist facilities such as science laboratories, rather than simply adding classrooms. In the event that a new secondary school is required (for example if there is a large new development area), a land allocation in line with the standards of the relevant local authority should be reserved.
- Special Educational Needs and Disabilities (SEND): provision for students with SEND is by its nature bespoke and responds to the needs of the specific individual. Schools specialising in SEND provision are reaching capacity across the area and are likely to require investment to meet the needs of the growing population.

Cross-boundary cooperation

School place planning is generally carried out at the local level, reflecting the fact that most students will attend a school close to their home. Where a development comes forward in an area on or close to the boundary of two local authorities cooperation on planning takes place on a case-by-case basis.

Background documents

- Bath and North East Somerset Council Primary and Secondary School Organisation Plan 2013 – 2017 (including longer-term place planning within the Core Strategy Plan period): http://www.bathnes.gov.uk/sites/default/files/sop_2013-2017_and_beyond_draft_iv_final.pdf
- Bristol City Council: Improving Lives, Improving Places: The Integrated Education and Capital Strategy 2015 – 19. www.bristollearningcity.com/education-capital-strategy
- North Somerset: Education Provision in North Somerset A Commissioning Strategy 2015 to 2018: [http://www.n-somerset.gov.uk/Your_Council/Policies_plans_and_strategies/Documents/education%20commissioning%20strategy%20\(pdf\).pdf](http://www.n-somerset.gov.uk/Your_Council/Policies_plans_and_strategies/Documents/education%20commissioning%20strategy%20(pdf).pdf)
- South Gloucestershire Council: Commissioning of Places Strategy 2012-2017: http://www.southglos.gov.uk/Documents/COP_Strategy2012_2017.pdf

Appendix C

Plan of recent and committed strategic infrastructure improvements.

Recent and committed strategic infrastructure improvements

