

Malvern Hills District, Worcester City and Wychavon District Councils

South Worcestershire Infrastructure Study Update (2019)

Final Report

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ARUP

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Introduction and Methodology

1 Introduction

Overview

The South Worcestershire Councils (consisting of Malvern Hills District Council, Worcester City Council and Wychavon District Council, and hereafter known as the ‘SWC’) commissioned Ove Arup and Partners (Arup) to undertake an Infrastructure Study and Delivery Plan for the three Local Authority areas (‘SWC area’).

Role of the Infrastructure Study

The South Worcestershire Infrastructure Delivery Plan (SWIDP) was last published in July 2016, and previously updated in 2012, 2014 and 2015. The SWIDP informed the South Worcestershire Development Plan, which was itself adopted in 2016, with the associated Delivery Schedule (formerly Appendix Y) updated subsequently to support the implementation of the Community Infrastructure Levy by the three Councils in 2017.

Following the publication of the Regulation 18 South Worcestershire Development Plan Review Issues and Options Consultation in December 2018, the Infrastructure Study forms part of the evidence base to inform the Preferred Options stages of the emerging Development Plan Review. By bringing together the views of expert stakeholders and existing evidence, the Infrastructure Study will seek to understand the quality, capacity and shortfalls in existing infrastructure in accordance with national policy and guidance.

The Infrastructure Study will support the creation of cross-boundary strategic policies as set out within Paragraph 20 of the National Planning Policy Framework 2019, which requires such policy to set out an overall strategy for the pattern, scale and quality of development, and to make sufficient provision for different infrastructure types.

Structure of the Report

The Infrastructure Study does not start from scratch. This document builds on the South Worcestershire Infrastructure Delivery Plan 2016 to account for the following changes:

- Policy changes and strategy updates at national and local levels;
- The levels of growth proposed in the Development Plan Review and the future infrastructure requirements associated with this; and,
- Broad updates on the infrastructure projects delivered or progressed since the last IDP in 2016, where available.

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 infrastructure requirement 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; and,
- **Appendix A** builds on the previous Delivery Schedule (formerly Appendix Y in the 2016 IDP), to include an update on Infrastructure Projects across the SWC area.

2 Policy Context

Revised National Planning Policy Framework

Reiterating the role of the planning system in contributing to achieving sustainable development, the National Planning Policy Framework (NPPF) (2019) requires plans to be prepared with the objective of contributing to the achievement of sustainable development and be informed by early, proportionate and effective engagement with infrastructure providers and statutory consultees.

The NPPF Paragraphs 17 and 20 require the development plan to include strategic policies to address each local planning authorities' priorities, which can be contained within joint plans produced by authorities working together, to make sufficient provision for:

- a) housing (including affordable housing), employment, retail, leisure and other commercial development;
- b) 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);
- c) community facilities (such as health, education and cultural infrastructure); and;
- d) 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.

Whilst these strategic policies should look ahead over a minimum 15-year period to enable a long-term view of requirements and opportunities arising from major improvements in infrastructure, NPPF Paragraph 33 requires local

plans and spatial development strategies to be updated at least once every five years.

The NPPF Paragraph 34 sets out that plans should set out the contribution expected from development. This should include setting out the levels of infrastructure needed, including education, health, transport, flood and water management, green and digital infrastructure.

Planning Practice Guidance

The Planning Practice Guidance (PPG) reiterates the importance of early engagement and collaboration with infrastructure providers, service delivery organisations and other strategic bodies, to identify infrastructure deficits and requirements, including opportunities for addressing them by:

- Assessing the quality and capacity of infrastructure, and its ability to meet forecast demands. Where deficiencies are identified, policies should set out how those deficiencies will be addressed; and,
- Take account of the need for strategic infrastructure, including nationally significant infrastructure, within their areas.

Going forward, the SWCs will need to prepare an Infrastructure Funding Statement, setting out the anticipated funding from developer contributions and the choices local authorities have made about how these contributions will be used¹. These Statements will need to be reviewed annually and include feedback mechanisms to ensure plans remain deliverable².

The PPG also requests that infrastructure providers plan for longer-term infrastructure requirements and set these out within their funding and investment decisions.³

¹ Paragraph: 059 Reference ID: 61-059-20190315

² Paragraph: 060 Reference ID: 61-060-20190315

³ Paragraph: 060 Reference ID: 61-060-20190315

South Worcestershire Context

Adopted Plan

Development Plan: The South Worcestershire Development Plan was adopted in 2016, establishing the principles for growth across the SWC area. This Development Strategy and site allocations in the SWDP makes provision for 28,400 housing units and 280ha of employment land across the area. Policy SWDP 7 *Infrastructure* states:

A. The partner authorities will work closely with their partners, especially the County Council, to bring forward the appropriate and proportionate infrastructure that is required in order to deliver the Plan.

B. Development will be required to provide or contribute towards the provision of infrastructure needed to support it.

C. Where new infrastructure is needed to support new development, the infrastructure must be operational no later than the appropriate phase of development for which it is needed.

The previous spatial strategy set out in the SWDP was for urban intensification in Worcester and the delivery of urban extensions. This was as a result of the housing need requirements of Worcester which could not be met within the administrative boundary and are therefore being planned for across South Worcestershire Councils areas.

Community Infrastructure Levy Adoption: Examination of the Draft Charging Schedule for Community Infrastructure Levy took place in November 2016 and was adopted in 2017. The levy will help fund the requirements set out within the SWIDP 2016. Schemes within the SWIDP are defined within the Regulation 123 List⁴, this provides certainty of schemes which CIL intends to fund.

⁴ The incoming Community Infrastructure Levy (Amendment) (England) Regulations 2019 will remove Regulation 123 in its entirety. See Next Stages on Page 15 of this Report for more detail on this.

Emerging Plan

The SWC started a review of the Development Plan in late 2017, in line with new Government requirements that Local Plans should be updated every 5 years. The review will provide an updated Plan Period to the year 2041, and with the Local Development Scheme confirming the following timescales for completion:

- Preferred Options Regulation 18 Consultation (November / December 2019);
- Publication Regulation 19 (October / November 2020); and,
- Submission (February 2021).

Within the Local Development Scheme (adopted October 2018) there are no plans to review the Community Infrastructure Levy (CIL).

The Issues and Options for the Review were consulted upon in November and December 2018. This established that the authorities will seek to deliver a further 14,000 homes and almost 250 hectares of employment land up to 2041.

The proposed development strategy in the Review outlines the retention of the approach set out in the SWDP with an additional strategy for rail station-focussed development. This further reinforces the role of infrastructure within this growth strategy: enabling people access to work, services and facilities within Worcester and the surrounding area.

The SWCs are working towards developing Preferred Options for consultation in Autumn 2019 and have identified three strategic development locations for the focus of growth: Worcester Parkway, Throckmorton Airfield and Rushwick. Further intensification of the Worcester City urban area is proposed, with varying levels of development in South Worcestershire's main settlements and across category 1, 2 and 3 settlements. The Spatial Distribution of Growth is set out in **Table 1**.

Table 1 Growth Distribution

Town	Housing	Employment
Parkway (new settlement)	5,000 to 2041 – potential for further growth in subsequent plan reviews	60 ha
Throckmorton	2,000 homes to 2041 – based around Pinvin A44 – potential for further growth in subsequent plan reviews.	10 ha
Rushwick	1,000 dwellings to 2041 – potential for a further 500 post 2041	5ha
Worcester City	1,300 dwellings	11.8ha
Worcester Business Park		36ha (estimate)
Droitwich	600 dwellings	21.4ha
Evesham	200 dwellings	20.1 ha
Malvern	700 dwellings	20ha (not confirmed)
Pershore	600 dwellings	1.9ha
Tenbury Wells	120 dwellings	0ha
Upton	120 dwellings focussed on Tunnel Hill	0ha
Mitton	500 dwellings	0ha
Rural Areas	1,860 distributed between category 1,2, and 3 settlements	14.5ha in Malvern Hills 49ha in Pershore

The growth at Mitton and reduction in growth within the Rural Areas was an amendment proposed late within the IDP process. Where possible, this proposed growth has been included within the infrastructure calculations, however, location-specific responses from providers were not always achievable in the timescales. This will be updated in the next iteration of the IDP post-consultation.

The next iteration of the IDP will also require a review of individual sites with infrastructure providers.

Context for Infrastructure in South Worcestershire

There are a number of planning documents that help to provide an appreciation of priority matters for the area and have informed the IDP.

National Infrastructure Delivery Plan 2016-2021⁵, Infrastructure and Projects Authority: The National Infrastructure Delivery Plan (NIDP) collates the Government's approach to economic infrastructure to support the delivery of housing and social infrastructure between 2016 and 2021.

The NIDP outlines over 600 infrastructure projects and programmes across the UK totalling over £480bn of investment to 2021. Whilst not specific to South Worcestershire, the following overarching programmes could have implications upon growth in the area:

- Shaw Review of Network Rail;
- NIC energy study – inclusive of £50m of innovation in energy storage and other smart technologies and £100m of funding from Ofgem;
- Broadband Investment Fund and 5G strategy and planning;
- £700m flood defence and resilience funding;
- Rail station regeneration;
- Release of local authority land for housing;
- The creation of Midlands Connect as sub-national transport body; and
- Compulsory Purchase Order reforms.

The NIDP sets out an expectation for a mixed model approach to funding and finance with a circa 50/50 split between public sector and private sector financing of projects averaged across all infrastructure types to 2021.

A variety of funding and finance approaches are set out in the NIDP, including: the UK Guarantees scheme, which supports infrastructure projects to raise private investment in the market; Private Finance 2, which uses private finance to deliver public sector assets such as schools and hospitals and the European

⁵ HM Treasury (2016) National Infrastructure Plan. Available: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/520086/2904569_nidp_deliveryplan.pdf

Investment Bank which lends to the government and infrastructure providers to deliver projects.

Whilst the NIDP does not identify any projects within South Worcestershire, there are a number of projects which are likely to have regional implications.

Worcestershire Strategic Economic Plan (2014⁶), Worcestershire LEP:

Worcestershire's Strategic Economic Plan (SEP) sets out an ambitious vision to grow the local economy, creating over 25,000 jobs and to increase Growth Value Added (GVA) by £2.9billion. The SEP sets out that the WLEP is seeking investment totalling £47.1 million from the Local Growth Fund (from Government) in 2015/16 to support 19 projects.

The following support is sought with particular relevance to South Worcestershire:

- Delivery of frequency and journey time improvements (under 2 hours) from Worcester to London and to include Worcestershire Parkway in the new Great Western Franchise.
- Partner with the Joint Property Vehicle (JPV) proposal in order to maximise the benefits of a single estate management team with responsibility for a common public sector estate strategy.
- Enable the delivery of Malvern Hills Science Park in partnership with Homes and Communities Agency (now Homes England).
- Enable the funding 'overmatch' of broadband rollout.
- Commission a feasibility study on a geothermal heat pilot in Worcestershire.
- Ring-fence 10% of existing Further Education (FE) spending in Worcestershire to be jointly commissioned with WLEP to accelerate investment in skills.
- Ring-fence £1.5m of existing apprenticeship budgets to WLEP to develop employer-led Level 4 apprenticeship frameworks.

- Collaborate with WLEP businesses, local partners and regulators in the Worcestershire Agri-Tech, Horticulture and Forestry Sector.
- Commission a feasibility study to develop a Centre for Agricultural Innovation.
- Ask the Department for Transport to prioritise funding for both M5 Junction 6 and the Carrington Bridge dualling elements of the A4440 Worcester Southern Link as part of the Department's capital programme 2016/17 to 2020/21.
- Endorse the 'Worcestershire Infrastructure Investment Fund' to approve full retention of non-domestic rate income on the identified 'Game Changer' Sites.

Worcestershire LEP Delivery Plan Document 2019/20, Worcestershire

LEP: The Delivery Plan document provides an update on the delivery of the projects and schemes associated with the support requested in the SEP back in 2014.

The following schemes have been delivered:

- Construction of Pershore College's AgriTech Research Centre was completed.
- Heart of Worcestershire's Centre of Digital Engineering (CODE) was launched.
- Worcester Six Business Park announced more occupiers, including Spire Healthcare, Siemens, Kimal and Kohler Mira.
- Worcestershire Energy Strategy.
- New Road Flood Alleviation scheme, Worcester.
- Superfast Broadband rollout (Contract 1).
- Evesham engineering centre.

The following schemes from the Local Growth Fund programme are in construction/delivery stage:

- Superfast Broadband rollout (Contract 2).
- Malvern Hills Science Park (Phase 5).
- Upton-upon-Severn Flood Alleviation scheme.
- Pershore Northern Link Road.

⁶ Worcestershire LEP (2014) Strategy Economic Plan Available: <https://wlep.co.uk/wp-content/uploads/WLEP-Final-SEP-310314-V-1-1.pdf>

- Worcestershire Parkway Rail Station.
- Heart of Worcestershire College's Duckworth Centre for Engineering.

Worcestershire County Council Corporate Plan 'Shaping Worcestershire's Future'⁷: The refreshed Corporate Plan set out four key priorities for working with partners and communities in Worcestershire over the next 5 years. These key priorities include: championing 'open for business'; protecting the environment; supporting children and families; and, promoting health and well-being⁸. A range of these priorities link to the delivery of infrastructure and increasing the connectedness of the county.

This Plan accords with the vision set out in the Strategic Economic Plan in seeking to create 25,000 extra jobs and build 21,500 new homes by 2025. It identifies the Worcester Growth Corridor and Malvern Hills Science Park as helping to deliver these new jobs, supported by infrastructure investment such as Worcester Parkway Rail Station and the dualling of Southern Link Road (A440).

Worcester City Council Plan 2016-2021 (2016)⁹: The Plan sets out the strategic vision for Worcester City Council for the five-year period to 2021 on the basis of five key themes: Stronger and Connected Communities; A Prosperous City; A Healthy and Active City; A Heritage City for the 21st Century and; Sustaining and Improving our Assets.

This includes: creating inclusive communities, where issues such as isolation are tackled; attracting good employers and ensuring everyone has the chance to get the opportunities, training and jobs; residents enjoying healthy and fulfilling lives; attracting visitors to enjoy leisure and; sustaining and improving the city's environment.

Malvern Hills Five Year Plan 2016-2021 (January 2017)¹⁰: The Plan sets out 10 actions under three overarching objectives: building stronger and healthier

communities; driving economic prosperity and growth and; making the most of our superb environment.

The actions include: housing delivery; improving people's health, supporting communities; bringing forward land and premises for business; developing skills; promoting innovation; improving infrastructure and broadband speed; improving parks and open spaces; improving the visitor experience and; finally, reducing the impact of flooding.

Wychavon 'Our Strategy' 2016-2020 (April 2016)¹¹: The strategy sets out the council's purpose to deliver services and improve life by: keeping people active, helping people recycle, keeping streets clean, investing in communities, supporting the economy. The four-year strategy sets out goals against the topics of people, place and prosperity:

- Helping people to be healthy, active and supported;
- Supporting people most in need;
- Keeping the district clean, green and safe;
- Delivering quality, affordable homes;
- Attracting businesses and quality jobs;
- Improving people's skills to succeed; and,
- Supporting and engaging with communities.

⁷Worcestershire County Council (2017) Shaping Worcestershire's Future. Available: http://www.worcestershire.gov.uk/downloads/file/861/worcestershire_future_fitpdf

⁸ WCC (2017-2022) Shaping Worcestershire's Future

⁹ <https://www.worcester.gov.uk/documents/10499/8492411/Worcester+City+Plan+2016-2021+FINAL+-+compressed.pdf/d6d97fcd-df94-4b7d-ba48-e98b7cc83fa8>

¹⁰ <https://www.malvern hills.gov.uk/documents/10558/125552/Five+Year+Plan+2016-2021+May+2017.PDF/0bd8a605-b5b8-d3f9-61ff-b61b3534e506>

¹¹ <https://www.wychavon.gov.uk/documents/10586/8576613/2019+strategy+poster.pdf/4381d860-e66b-4155-6a85-74c5c5d69014>

3 Approach and Methodology

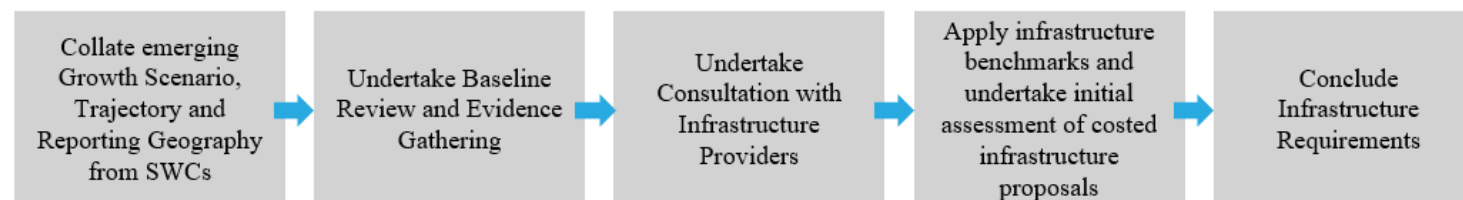
Structure

The proposed approach for the South Worcestershire Infrastructure Update 2019 builds on the SWC IDP (2016). It does not ‘start from scratch’ nor repeat detail set out within the 2016 version of the IDP, and seeks to refresh only sections where content has changed, as follows:

- Responsibility for delivery and changes since the 2016 IDP;
- Overview of progress since the 2016 IDP;
- Assessment of existing infrastructure provision, needs and costs;
- Planned provision and scheme identification based on revised needs;
- Conclusion and summary of schemes for inclusion in the infrastructure schedule (set out in full at Appendix A).

Methodology

The methodology for undertaking the Infrastructure Study (2019) update comprises five stages:



The IDP draws together baseline information from infrastructure and service providers for transport, utilities, community and green infrastructure and services that will be required to support housing and employment growth and unlock development sites. 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 & Highways | - Education |
| - Utilities | - Community Facilities |
| - Flood Risk & Drainage | - Healthcare |
| - Communications | - Open Space, Sport & Recreation |
| - Waste | - Emergency Services |

Establishing and updating infrastructure baseline

The first task of the IDP is to undertake a desk-based review of the relevant published evidence base documents from the South Worcestershire Development Plan, as well as those documents produced by infrastructure and service providers. As set out above, this IDP does not start from scratch and the previous iteration of the IDP has also been reviewed. This task is undertaken to gain an understanding of the baseline level of infrastructure, identify any locally-derived standards for the provision of specific infrastructure types and anticipated growth in relation to the required scope of infrastructure.

Through the process of preparing a comprehensive desk-based review, the IDP identifies the baseline for the existing levels of provision, analyses current surpluses and deficits and seeks to review the potential future implications of the three districts' existing physical, social and green infrastructure requirements.

Undertaking consultation with infrastructure providers

To check the established baseline, consultation is undertaken with infrastructure providers, service delivery organisations and other strategic bodies such as Local Enterprise Partnerships. Organisations identified for consultation are set out in Table 2.

The focus of consultation is to:

- Review the baseline level of current infrastructure set out within the SWCs IDP to understand if this remains relevant and a reflection of the current situation;
- Identify any additional planned schemes, including any infrastructure requirements committed by consented strategic site schemes or large schemes;
- Review the known potential implications of proposed growth and infrastructure required to support the delivery of larger sites, including how this relates to the phasing of development;
- Outline any cross-boundary issues;
- Identify delivery bodies for example, the extent to which the LEP has been involved and what guarantees have been given by service providers;

- Where possible, confirm known information on costs and scheduling of works; and,
- Review known funding sources.

Table 2 Consultation with infrastructure providers

Infrastructure Topic	Stakeholder
Transport	Worcestershire County Council Highways England Network Rail
Utilities	Western Power Distribution (WPD) Wales and West Utilities National Grid Gas Severn Trent Water
Flood risk and drainage	Environment Agency SWCs
Communications	Worcestershire Local Enterprise Partnership (LEP) Worcestershire County Council (Superfast Worcestershire)
Waste	Worcestershire County Council
Education	Worcestershire County Council
Health and Social Care	NHS England South Worcestershire CCG Worcestershire AHT Worcestershire HCT Worcestershire County Council
Community Facilities	Worcestershire County Council SWCs
Green infrastructure, sports and recreation	SWCs Worcestershire GI Partnership
Emergency facilities	Worcestershire County Council Place Partnership, who have contacted West Mercia Police, Hereford & Worcester Fire and Rescue Service and West Midlands Ambulance Service

Each of the consultees identified above has had the opportunity to review and comment on the respective chapter of this report.

Assessment of infrastructure needs and deficits

Once the infrastructure baseline is established through desk-based review and stakeholder discussions, derived standards in provision, alongside known information on costs, gathered as part of the stage are applied to the growth distribution in Table 1. The application of standards enables the identification of the planned infrastructure required and gaps in infrastructure provision for each strategic site and settlement within the South Worcestershire area.

The benchmarks and standards identified are set out within each respective infrastructure chapter and applied to distribution of growth proposed for inclusion within the Preferred Options version of the Plan review. These are included in a tabular format set out within this IDP Report and tables are collated against the infrastructure schedules in **Appendix A**. A review of existing and emerging delivery mechanisms and funding sources is included to identify any barriers to their successful operation.

This assessment undertakes a review of existing and emerging delivery mechanisms and funding sources relevant to the infrastructure type and includes consideration of: planning obligations, central government funding and ad-hoc bidding opportunities.

Next Stages

The IDP is based on the growth distribution informing the Preferred Option version of the SWC Development Plan Review. The IDP should be considered to be a live document which will need to be updated at each plan-making stage.

In advance of preparing the next stage of the Development Plan Review, the following stages will be necessary:

- Review detailed growth distribution (at a site-level) with Infrastructure Providers, and confirm the conclusions drawn at Mitton;
- Review the phasing of the preferred sites and the trajectory for infrastructure delivery;

- Incorporating responses to the Preferred Options consultation, and,
- Engage with statutory consultees, infrastructure providers and developers to further understand timescales for on-site provision and delivery of infrastructure.

In addition, iterations of the IDP should note the Community Infrastructure Levy (Amendment) (England) Regulations 2019. These were made in Parliament on 9 July 2019 and came into force on 1 September 2019. The most relevant changes are as follows:

- Councils will be obliged to replace their Regulation 123 lists with new Infrastructure Funding Statements.
- Abolition of Regulation 123. This will mean that more than five Section 106 payments can be used together to fund a single infrastructure project.
- The abolition of Regulation 123 means that Section 106 and CIL can be used to together the fund the same infrastructure project.

Infrastructure Assessment: Transport

4 Infrastructure Assessment: Transport

Responsibility for delivery

This section of the IDP addresses whether the transport network within the SWC council area is currently considered to meet demand and the implications of proposed growth on this infrastructure. The chapter considers road and rail networks, public transport and cycling. Informed predominantly by the Worcestershire County Council Local Transport Plan 4 (2018-2030) (LTP4), Worcestershire Rail Strategy (2017), and a review of policy and strategy changes by transport mode. Planned schemes are grouped by settlement to reflect the style of the LTP4. The responsibilities for delivering each transport mode is set out within **Table 3**.

Overview of changes since the 2016 IDP

Literature, Policy and Strategy Changes

Improving connectivity and transport infrastructure is identified as a key priority in achieving the key themes of Worcestershire's Corporate Plan 'Shaping Worcestershire's Future', meeting the identified growth demands of the individual Local Planning Authorities within Worcestershire and supporting the economic growth ambitions within the Worcestershire Strategic Economic Plan.

All transport modes

Department for Transport, Transport Investment Strategy 'Moving Britain Forward' (2017)¹²: The Strategy highlights that high-performing infrastructure is essential to delivering the Industrial Strategy, and provides greater information for how the National Productivity Investment Fund could be

Table 3 Responsibilities for Delivery

Transport Mode / Infrastructure Type	Responsibility
Strategic Road Network	The Strategic Road Network, including the Motorway and Trunk Road network, is managed by Highways England. Within South Worcestershire this includes the M5, M50 and A46 ¹³ .
Major Road Network / Primary Highways	The A38, A44, A4440, A422, A449, A456, A443, A4103 and A4104 are maintained by the County Council as the Local Highways Authority ¹⁴ .
Rail	The railway network in South Worcestershire Council areas is managed by Network Rail with several franchisee's operating. Stations in the area include: Malvern Link and Great Malvern in Malvern Hills; Pershore, Evesham and Droitwich Spa in Wychavon; and Worcester Foregate Street and Shrub Hill in Worcester. Worcestershire Parkway, in Wychavon is the focus of significant recent investment (new station).
Buses	Buses are operated by a range of providers, including Arriva Midlands, First, National Express West Midlands, Worcestershire County Council and Stagecoach. A large number of private providers service parts of the SWC area and adjacent authorities ¹⁵ .
Passenger Transport	School transport: There are specific provisions within the 1996 Education Act relating to the provision of Home to School transport. The effect of these is that there are circumstances where the County Council, as Local Authority responsible for education has a duty to provide Home to School Transport. Social Care Transport: Worcestershire County Council has a duty under the Social Work Act (2017) to assess a person's community care needs and decide in light of that assessment, whether to arrange any services and, if so, which services. Under the National Health Service and Community Care Act, 1990, Local Authorities were given the responsibility for community care for older people, and services were to be provided on the basis of what the older person needed. The Council operates a number of scheduled passenger transport services providing access to Adult and Older People's Day Services. Transport is also provided on a 'call out' basis for social care service users as and when required. Community Transport: Operated by community groups on a not-for-profit basis.

¹²https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/624990/transport-investment-strategy-web.pdf

¹³https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/800964/Network_management.pdf

¹⁴ http://www.worcestershire.gov.uk/downloads/file/9024/worcestershire_s_local_transport_plan_ltp_2018_-_2030

¹⁵ http://www.worcestershire.gov.uk/info/20021/bus_travel/835/bus_operators

allocated for transport infrastructure. Through focussing on technology and driving efficiency, the aim of the Investment Strategy requires transport infrastructure to:

- Create more reliable, less congested and better-connected transport network;
- Build a stronger, more balanced economy by enhancing productivity and responding to local growth priorities;
- Enhance our global competitiveness by making Britain a more attractive place to trade and invest; and,
- Support the creation of new housing.

Worcestershire County Council, ‘Shaping Worcestershire’s Future’ (2017-2022)¹⁶: The Corporate Plan recognises that transport infrastructure investment will need to be targeted to unlock growth across the country. Reducing journey times across the county and beyond is a key ambition, with priorities for investment including Worcestershire Parkway Rail Station (in progress) and completing the dualling of the Southern Link Road (A4440) in South Worcestershire. Improving access to technology, for example, focusing on smarter traffic signalling systems would support increased journey times, whilst enhancing opportunities for travel choice (including walking and cycling) was also considered to be a key priority.

Worcestershire County Council, Local Transport Plan 4 (LTP4) (2018-2030)¹⁷: One of the most fundamental changes since the preparation of the last iteration of the IDP is the preparation of the LTP4. Reflecting the Worcestershire LEPs and Local Plan’s visions for growth, this Plan sets out Worcestershire County Council’s priorities for investment in transport networks that are essential for continued social and economic success. Noting that capacity enhancements are often most-costly and do not discourage travel by

more sustainable modes, the LTP4 is focussed on targeting investment in three broad areas:

- Transport technology to manage demand, tackle congestion, improving road safety and supporting growth;
- Travel choice to enable the economy to diversify and grow; and,
- Capacity enhancement, using suitable business cases to deliver capacity enhancements at key pinch points and tackle congestion, improve air quality and address road safety.

Schemes listed within the LTP4, which are in progress or planned, are set out further within ‘Planned Provision’ section, whilst schemes that have been delivered since 2016 are set out in the next section. Schemes identified within the LTP4 are however, based on the proposed levels of growth within the adopted SWC Local Plan to 2030. The LTP4 and schemes within this will need to be updated to align with the proposed levels of growth within the Local Plan Review.

Highways Specific

Department for Transport, Road Investment Strategy (2015 – 2020)¹⁸ and **Road Investment Strategy 2 Post 2020**¹⁹: Since the management and funding of the Strategic Road Network (SRN) was reformed in 2015, the Road Investment Strategy and recent update sets out a pipeline of investment for transforming the SRN by 2040. The focus of investment increasing safety, improving efficiency and journey times, and reducing the impact on the environment or air quality.

Although within the early stages of review, the Road Investment Strategy 2 set out a programme of refreshed route strategies covering the entire network area. Although none of the strategic study focus areas are within the SWC area, RIS2

¹⁶http://www.worcestershire.gov.uk/download/downloads/id/861/shaping_worcestershires_future_our_plan_for_worcestershire_2017_to_2022.pdf

¹⁷http://www.worcestershire.gov.uk/downloads/file/9024/worcestershire_s_local_transport_plan_ltp_2018_-_2030

¹⁸https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/408514/ris-for-2015-16-road-period-web-version.pdf

¹⁹https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/752066/draft-road-investment-strategy-2-governments-objectives.pdf

sets out that £25.3bn funding will be made available for a five-year period between 1 April 2020 and 31 March 2025. It is expected the final RIS2 will be published in late 2019.

Initial work on RIS2 indicates that a Major Road Network will be designated across the country – which will help address pinch-points that would otherwise force traffic onto the SRN.

Road to Zero (DfT, July 2018)²⁰: The ‘Road to Zero’ Strategy was prepared by the Department for Transport in relation to cleaner road transport and delivering the Industrial Strategy. The Strategy outlines measures which amount to nearly £1.5bn of investment. Measures include:

- Through the roll-out of a new £400 million EV Charging Infrastructure Investment Fund (CIFF), the strategy aims to deliver the best electric vehicle charging in the world by catalysing private investment in charging infrastructure. The Strategy also calls for development to be designed to enable charging of plug-in vehicles and to consider on-street charging.
- Delivery of hydrogen and fuel-cell powered transportation, through the Hydrogen for Transport Programme which totalled £32m in 2017.

Rail specific

Network Rail Railway Upgrade Plan – Western (2017-18): The Strategy that North Cotswold rail upgrade plan, which included the lengthening of platforms at seven stations along the North Cotswolds Line, was programmed for completion by 2019. This will enable access to new longer trains, affecting Worcester, Pershore, Evesham and Honeybourne stations.

Network Rail CP6 Delivery Plan (2019 – 2024)²¹: The Network Rail control period runs from the 1 April 2019 and spans for five years, focussing on running a safe, reliable, efficient and growing railway. The delivery of a new stop at the newly opened Worcestershire Parkway Station (due to open in Winter 2019), was identified within the CP6 period²².

²⁰https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/739460/road-to-zero.pdf

²¹<https://cdn.networkrail.co.uk/wp-content/uploads/2019/06/Western-CP6-Delivery-Plan.pdf>

Worcestershire Rail Investment Strategy (2017)²³: This Strategy sets out the improvements to the rail service that would deliver the greatest uplifts in GVA and new jobs for Worcestershire and aspirational infrastructure schemes essential to facilitate this new connectivity. Although electrification schemes have been put on hold since 2017, schemes within the SWC include:

- **North Cotswolds Line Capacity Upgrade:** Doubling of part or all of the Norton Junction-Evesham and Charlbury-Wolvercote Junction sections (championed by the North Cotswold Line Task Force);
- **Worcester Area and Droitwich Spa Capacity Upgrade:** Providing additional capacity for services passing through Shrub Hill and Foregate Street and doubling of the Droitwich-Stoke Works junction between Droitwich and Bromsgrove single line (together with re-signalling);
- **New Car Park capacity:** Addressing the structural shortfall of current car parking capacity and providing capacity for up to 100% passenger growth by 2043, either at existing or new stations; and,
- **Worcester Shrub Hill Station Regeneration:** Enabling Shrub Hill to support both current train services and new services proposed in this Rail Investment Strategy and leading to a step-change in economic regeneration of the Shrub Hill Opportunity Zone and the areas to the east of the City Centre.

West Midlands Rail Investment Strategy 2018 – 2047²⁴: Within the Strategy, the Birmingham South – Worcester – Hereford Line is identified as a High Growth Rail Priority Corridor (2018 – 2032). Schemes within South Worcestershire include:

- **2019:** Completion of Worcestershire Parkway Station (2019);
- **2026-2034:** Capacity works in the Worcester area and North Cotswold Line capacity; and,

²²<https://cdn.networkrail.co.uk/wp-content/uploads/2017/06/Railway-Upgrade-Plan-Update-2017-Western.pdf>

²³<https://www.worcestershire.gov.uk/wris>

²⁴<http://wmre.org.uk/media/14045/west-midlands-rail-report-final-version-jan-2019.pdf>

- **2034:** Capacity works between Hereford and Great Malvern and new Worcester suburban stations.

Passenger Transport

Passenger Transport Strategy (2019 – 2030)²⁵: The Worcestershire Passenger Transport Strategy has been developed to support the LTP4. The Strategy recognises that Passenger Transport Services form the ‘backbone’ of Worcestershire’s transport network, which provides an efficient, resilient and integrated system. The Strategy focuses on road and rail passenger transport services within Worcestershire, including Home to School, bus, taxi, Community Transport and other community-based bespoke transport initiatives.

The Strategy states that in planning for new developments, WCC will work with planning authorities and developers to ensure the delivery of planned development considers the opportunities for access by a range of travel modes. This includes commercially viable, long term accessibility by passenger transport to key services, including:

- **School Transport:** WCC may provide free transport to children who attend the nearest, designated school which are in excess of the statutory walking distances²⁶, or routes which are deemed to be unsafe to walk unaccompanied. Transport assistance for post-16 students will comprise a place on the contracted school bus, or assistance with a concessionary ticketing scheme.
- **Social Care Transport:** In response to the Social Work Act (2018), WCC has a duty to provide services based on the needs of the older person. In addition, The Council operates a number of scheduled passenger transport services providing access to Adult and Older People’s Day Services. Transport is also provided on a ‘call out’ basis for social care service users as and when required. At the discretion of the social care service, the Council will provide: Home-to-Day

service transport for users of Older People and Physical Disability Services, and appropriate transport for users of Children’s Services.

- **Community Transport:** Operated by community groups on a not-for-profit basis, these offer a valuable service for everyone in the county. WCC will continue to work with the Community Transport operators to provide technical and operational advice for funding opportunities.

Active Travel: Walking and Cycling

Cycling and Walking Investment Strategy (2017) and Review (2018)²⁷: Produced by the Department for Transport, the Strategy sets out the government’s ambition to make cycling and walking a natural choice for journeys by 2040. The Department for Transport runs a number of programmes dedicated to cycling which are outlined in the local transport programme, including Bikeability, Cycling Ambition Cities, Highways England or the Access Fund.

WCC Cycling Economy and Environment Overview and Scrutiny Panel (May 2019)²⁸: Sets out WCC progress for the cycling and cycle schemes across the SWC area.

Schemes since 2016

The following schemes have been delivered since the 2016 IDP:

Table 4 Schemes delivered

Scheme	Summary
M5 Smart Motorways (Junction 4a to 6 Smart Motorway)	Making the M5 Junction 4a (Bromsgrove) to 6 (Worcester) an ‘All Lane Running’ smart motorway scheme was completed in Spring 2017, with the final phase of the scheme between Droitwich Spa and Bromsgrove opened in April 2019 ²⁹ .

²⁵ <http://www.worcestershire.gov.uk/passengertransportstrategy>

²⁶ Up to 2 miles for pupils of the age of 8; or up to 3 miles for older pupils

²⁷ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/603527/cycling-walking-investment-strategy.pdf

²⁸ <http://worcestershire.moderngov.co.uk/documents/b9760/Additional%20papers%20Cycling%20item%205%20and%20Congestion%20item%206%2008th-May-2019%2010.00%20Economy%20and%20Enviro.pdf?T=9>

²⁹ <https://highwaysengland.co.uk/projects/m5-junctions-4a-to-6-smart-motorway/>

Scheme	Summary
Worcester Wildwood-A44/A4440 Nunnery Way/A4440 Swinesherd Way/Wildwood Drive Junction	
M5 Junction 6 to Junction 9 Lighting Upgrade	From January to March 2019, using lane closures, lighting on the M5 has been upgraded to bring this to current standards, using new technology ³⁰ .
Tenbury Wells (Teme Street) Public Realm Enhancement Scheme (Phase 2) (LTP 2018 – 2030 Scheme T1)	A proposed package of public realm enhancements for Tenbury Wells Town Centre linked to the development of a supermarket in the town. This will involve the enhancement of Teme Street to match existing areas of the town, which have benefited from improvements.
High Street (Church Street to Priest Lane) Public Realm Scheme (LTP 2018 – 2030 Scheme P2)	Investment in this area of the town centre to enable it to support increased economic activity and diversification. This could include a redesign of space, new surfacing, lighting, drainage and functional changes to support enhanced accessibility by walking, cycling, passenger transport or motorised vehicle.
Foregate Street Station Enhancement Scheme (LTP 2018 – 2030 Scheme W2)	To build on the station enhancements delivered as part of the Worcester Transport Strategy (phase 1) during LTP3 to improve the passenger facilities at Foregate Street Station and the quality of the interchange with other transport modes. This would enable it to better fulfil its role as Worcester's principal railway station.
Fernhill Heath - A38 Droitwich Road / A4536 Hurst Lane Junction (LTP 2018 – 2030 Scheme SWST19)	Review of junction in terms of capacity, traffic flows and design.
Hanbury Street / Queen Street / Saltway / Bromsgrove Road (St George's Square) Junction (LTP 2018 – 2030 Scheme D1)	Completed comprehensive review of junctions in terms of capacity, traffic flows, design and signalling apparatus (where provided) to identify whether capacity and/or safety improvements are required.
A38 Roman Way / B4065 Bromsgrove Road Junction (LTP 2018 – 2030 Scheme D2)	

Scheme	Summary
Droitwich Spa High Street Public Realm Scheme (LTP 2018 – 2030 Scheme D5)	Package of Public Realm Enhancements in Droitwich Spa Town Centre.

Assessment of Current Infrastructure Provision

Current Provision

The assessment of where people who live in the SWC authorities choose to work³¹ indicates that the vast majority of people work within the SWC area, with wider commuting from / to Birmingham, other Worcestershire Districts and Stratford-on Avon. A significant number of Malvern Hills residents work in neighbouring Herefordshire, while Wychavon residents are likely to travel to Cheltenham and Gloucestershire authorities.

There are significant employment flows between the South Worcestershire districts with many people from Wychavon and Malvern Hills travelling to Worcester for work, but also residents from Worcester working in adjacent Wychavon and Malvern Hills authorities. The vast majority of people that live in SWC commute by car (72%), with mode share decreasing between working from home, walking or cycling, catching the bus or taking the train (2%).

Highways: In relation to highways, the area is considered to benefit from good access to the strategic network in the form of the M5, M50 and A46.

Following discussion with Highways England³² it was noted that M5 Junction 6 is currently being improved with works are underway to enlarge the junction. As a result of re-distribution effects of the A4440 Worcester Southern Link Road, traffic modelling has identified an increase in traffic to M5 Junction 7. There is uncertainty regarding the net impacts of change and whether a need to intervene will arise in the medium term.

In relation to the A46, Highways England³³ have noted that the 5 roundabout junctions along Evesham Bypass were identified as priorities for improvement.

³⁰ <https://highwaysengland.co.uk/regions/all-regions/?postcode=&keywords=&roads=&status=>

³¹ WU03UK - Location of usual residence and place of work by method of travel to work

³² Spatial Planning Framework Commission Technical Note (Systra /Aecom August 2019)

³³ Spatial Planning Framework Commission Technical Note (Systra /Aecom August 2019)

A number of previously planned developments will result in a series of piecemeal improvements to a number of junctions. The committed improvements, whilst welcome, do not address the full needs of all junction along the A46 Evesham bypass or the long-term needs of the junctions to be improved.

There was considered to be no relevant infrastructure deficits on the M50 route.

The A38, A44, A4440, A422, A449, A456, A443, A4103 and A4104 (i.e. the Major Road Network) are maintained by the County Council. The LTP4 identifies that some of the busiest roads in the county are located around South Worcestershire – with the busiest section include in the A44 Worcester Bridge in the City Centre. High levels of demand have led to peak time congestion, journey time unreliability and environmental issues include the designation of the following Air Quality Management Areas:

- **Worcester:** WCC identified that the whole of Worcester is identified as an AQMA. Junction 6 M5 Roundabout (designated June 2019)³⁴, Bridge Street / Dolday (2009), Lowesmoor / Rainbow Hill (2009) and St John's (2014)³⁵; and
- **Wychavon:** Worcester Road, Wychbold (designated 2018)³⁶.

Rail: The LTP4 considers that the SWC area is well connected from a number of rail stations, located in all the major urban areas except for Upton-upon-Severn and Tenbury Wells. The LTP4 considered that there were reasonably frequent services between Great Malvern, Droitwich Spa and the West Midlands. Rail demand has continued to grow across the SWC area, despite a lack of strategic connectivity to the Cross-Country Services which connect to North East / East Midlands / Birmingham and further afield.

Discussion with Network Rail (NR) considered that there were gaps in track and signalling infrastructure provision, with rolling stock and at the stations themselves. **Table 5** establishes these alongside those identified within the Rail Investment Strategy (RIS).

Table 5 Rail Infrastructure Delivery Gaps

	Summary of gap in provision	Source
Infrastructure	Range of single-line sections (between Evesham and Norton Junction, Birmingham to Abbotswood).	Discussions with NR
Infrastructure Stations	Worcester Shrub Hill can currently only handle 2-3 trains at present. There is a need to understand how best to accommodate passenger growth generated by more train services operating through the station.	RIS Discussions with NR
Infrastructure	Droitwich Spa to Stoke Works single line infrastructure was considered to be another area of inflexibility. Re-doubling and re-signalling was considered to be necessary to facilitate more frequent services to Birmingham New Street.	RIS Discussions with NR
Infrastructure	Worcester – London slow journey times and lack of frequency. This will require Worcester re-signalling, redoubling of North Cotswold Line and increasing to 2 trains per hour (tph) for Worcester – Oxford.	RIS Discussions with NR
Infrastructure	Lack of connectivity to a long-distance network. Resolving this will require opening up of the Worcestershire Parkway line for direct access to Cross-Country services, increasing trains to 2tph for Worcester-Oxford-London Paddington, Worcester / Abbotswood re-modelling and re-signalling, and potential Worcester Shrub Hill service to Bristol and Cardiff.	RIS
Infrastructure	Worcester-Birmingham slow journey times. This will be resolved by accelerating direct services between Worcester and Birmingham, alongside Droitwich-Stoke Works doubling.	RIS
Infrastructure	Limited southbound service from towns in the north beyond the SWC boundary.	RIS
Infrastructure Stations	Lack of car-parking and access points to the network. The RIS considered that this could be resolved by additional parking at Worcestershire Parkway (to accommodate Throckmorton and Pinvin), redevelopment of Shrub Hill station to improve accessibility and sustainable access to the City, additional parking at appropriate existing stations (Persore) and identification of new access points to the network.	RIS Discussions with NR

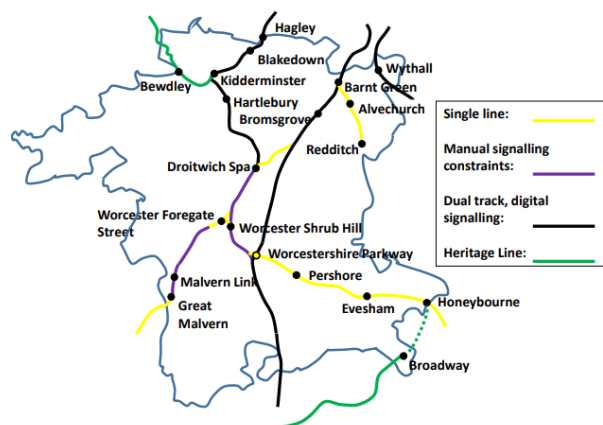
³⁴ <https://worcsregservices.gov.uk/media/4517364/AQMA-Worcester-Political-Boundary-110619.pdf>

³⁵ <https://worcsregservices.gov.uk/media/4517361/AQMA-Variation-110619.pdf>

³⁶ <https://worcsregservices.gov.uk/media/3697283/Worcester-Road-Wychbold-declaration-order.pdf>

	Summary of gap in provision	Source
Infrastructure Stations	The dynamics of rail capacity at Worcester between Foregate Street and Shrub Hill do not work. Worcester re-modelling and re-signalling is necessary to remove capacity constraints caused by the single line sections within the Foregate Street / Tunnel Junction / Shrub Hill area and mechanical signalling. The RIS states that this may be resolved through a masterplan for Shrub Hill station, delivery of Worcestershire Parkway and consideration of rail provisions (such as a parkway station at West of Worcester).	RIS Discussions with NR
Services	Discussions with Network Rail considered that, whilst links to London were generally well-provided for, there was insufficient capacity within the rolling stock to match infrastructure provision along a number of rail lines.	Discussions with NR

Figure 1 Rail Infrastructure Constraints (Rail Investment Strategy 2018)



Buses: Whilst the main providers of bus services are outside the Council's direct control, WCC will work in co-operation with commercial operators to help deliver an efficient, reliable bus network which meets the needs of the people of Worcestershire.

Challenges facing future delivery of transport infrastructure

The LTP4 considers that delivery of future transport infrastructure in the SWCs should consider the following challenges:

- To relieve congestion, enhance journey time reliability and aspects of road safety;
- To enable and promote growth, whilst increasing accessibility to areas of deprivation; and,
- To address deteriorated ambient air quality.

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

Planned Schemes

Appendix A1 set out the planned schemes within the Local Transport Plan 4 (2018 – 2030) and the Rail Investment Strategy (2017).

All costs, unless otherwise stated, are from Worcestershire County Council. These should be treated as outline estimates, and subject to the development of a business case to clarify actualised costs.

Strategic Demand: Strategic Road Network

Following discussions with Highways England, an overview of the proposed growth on the Strategic Road Network is outlined in Table 6 below. Whilst noting that the strategy for the Plan is likely to be rail-orientated, growth is still likely to result in significant levels of net growth in vehicle travel which might have particular traffic implications for the SRN.

In relation to specific junctions, Highways England note that:

- **M5 Junction 6:** It is unknown at this stage whether the proposed additional levels of growth can be accommodated by the recent investments to M5 Junction 6 in the long-term. The patterns arising from growth at Throckmorton, and potentially also at Parkway, would need to be considered as part of a cumulative assessment of the plan.

- M5 Junction 7:** Traffic impacts associated with the proposed development at this location are anticipated to combine with the additional cumulative impacts arising from development in the wider south Worcestershire network. The scale of the new Settlement proposals at Parkway (5000 dwellings) combined with their location on the east side of the M5, is likely to route significant volumes of local traffic arising from the development through the junction as the current highway configuration results in this being the shortest most direct route for travel between the new settlement and large parts of Worcester. The B4040 Whittington route, and junction arm at M5 J7, were not designed to accommodate significant volume of traffic on this arm a new settlement would be likely to introduce a new local functional role for Junction 7 that it was not designed for.

It is not generally preferred for a rural motorway junction to have dual function in this way as a new secondary role as part of new key local route could compromise the primary function of the junction due to the additional volume of traffic opposing existing traffic movements at the junction. It is evident that either significant improvement needs will be required at the junction, or alternatively a new local route that bypass the junction for traffic traveling between the development site and Worcester will be required.

Evesham Bypass: The scale of housing led development included in the proposals does not appear to be significant such that it would have a direct impact on A46 junctions at Evesham however the employment proposals may. This is likely to increase the urgency of the delivery of existing schemes within the IDP.

Table 6 Impact of growth

	Highways England ³⁷	
	Areas of SRN affected	Notes
Parkway (new settlement)	M5 J7	Very significant impact assumed
Throckmorton	M5 J6 & J7	Potential cumulative impacts with other growth sites
Rushwick	M5 J7	Potentially significant cumulative impacts
Worcester City	M5 J6 & J7	Potential cumulative impacts with other growth sites
Worcester Business Park	M5 J6	Assumed this is a further extension of Worcester 6 / Technology Park? - Potential significant impact
Droitwich	M5 Junction 5	Potential impact
Evesham	A46 Bypass Junctions - Cumulative	Potential impact
Malvern	Potential for distributed impact and cumulative effect upon issues along the M5 corridor.	Potential for distributed impact and cumulative effect upon issues along the M5 corridor
Pershore		
Tenbury Wells		
Upton		
Rural Areas		

Strategic Demand: Rail

Discussions with Network Rail identified that:

- Worcestershire Parkway:** The station was likely to be capable of accommodating additional demand, however of greatest concern was in relation to the capacity of the rolling stock. Trains on the Cotswold Line, originating from London or Worcester are typically 9-10 carriages, and therefore these are

³⁷ Spatial Planning Framework Commission Technical Note (Systra /Aecom August 2019)

likely to have sufficient capacity. Stock on the Bristol – Birmingham line are typically 2-3 carriages and would not be sufficient to meet increasing demand.

- **Cumulative Impact of Ashchurch (Tewkesbury), Throckmorton and Worcestershire Parkway:** Network Rail considered that the proposed level of growth between these three settlements was a key opportunity for rail, but also a significant concern in meeting the anticipated levels of demand. Depending on emerging travel to work patterns and travel plans, on-train capacity would be a concern based on existing levels of service provision.
- **Rushwick:** Network Rail considered that there are capacity constraints associated with the rail infrastructure in the area, with a delay of 3 minutes around Newlands. Midlands Connect were seeking upgrade to the Hereford – Birmingham Line.
- **Worcester City:** Development within the urban fabric of Worcester would be supported by future proposals at Worcester Shrub Hill and associated signalling improvements along the City railways.
- **Droitwich:** Network Rail set out that trains were already at capacity with passengers from Ledbury and Worcester, and car-parking provision had been maximised. Rolling-stock capacity required upgrade from 3 carriages to 6 carriages.
- **Evesham:** Network Rail identified that car-parking constraints may result in demand increasing for travel originating from Worcestershire Parkway. This would exacerbate cumulative impact of growth at Worcestershire Parkway.
- **Malvern:** Network Rail considered that whilst there is likely to be capacity within the network, with trains starting or finishing here, there was likely to be a cumulative impact on demand associated with Malvern-Droitwich-Birmingham route.
- **Pershore:** Whilst there was considered to be rail infrastructure capacity at this location, Network Rail considered that there would be only limited parking provision and emphasis would need to be placed on active travel to the station.
- **Tenbury:** Given the relative distance from the rail network, development at Tenbury was considered to have only a limited impact on the rail network.

- **Upton-upon-Severn:** Development at Upton-upon-Severn was considered to have a small but cumulative impact on train capacity for services heading to Great Malvern.
- **Mitton:** It was unclear what the impact of growth at Mitton would be, however this would add to the cumulative impact of growth at Ashchurch (Tewkesbury), Throckmorton and Worcestershire Parkway.

Network Rail recommended that early discussions were held with the Department for Transport in relation to the future shape of the relevant Train Operating Company franchises, notably Cross Country. This is with a view to increasing the capacity of the rolling-stock, particularly for the cumulative impact of housing and employment growth at Ashchurch (in Gloucestershire), Throckmorton and Worcestershire Parkway.

Network Rail also recommended early engagement with the relevant Sub National Transport Bodies – Western Gateway and Midlands Connect – to ensure that their emerging proposals for economic growth and rail investment are consistent with the future growth plans for South Worcestershire.

Sector-specific Funding

The LTP4 identifies that a number of funding streams will be needed to support the delivery of infrastructure schemes. However, it was noted that there is a current funding shortage which is likely to perpetuate, which would lead to some scheme prioritisation. Typical funding of highways schemes is as follows:

- **Government Capital Funding:** The LTP4 sets out that in most cases for major transport infrastructure (>£5million), Worcestershire County Council will be required to bid for funding, primarily from central government (such as through the National Productivity Investment Fund or Zero Carbon) or transport funding bodies. This will require the development of strong, evidence-based business cases to make the case for investment. Major transport schemes have been identified within the Planned Schemes table (see LTP Funding). In some cases, funding will be made available through a government-owned transport body – such as Highways England or Network Rail.

- **Major Road Network and Large Local Majors Fund (2018)**³⁸: The MRN is a new programme that will see substantial amounts of new investment available for road enhancement schemes on the most important local authority 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 or other devolved allocations. In SWC, Phase 4 of the South Link Road was funded through the Local Majors Fund³⁹.
- **Integrated Transport Block Funding**: Typically used to fund smaller transport improvement projects (<£5million), DfT allocated Worcestershire the Integrated Transport Block for £2.405 million for 2018/19. This fund is currently allocated according to a needs-based formula based on six elements: deprivation, road safety, public transport, air quality, congestion and accessibility.
- This is alongside a ‘Pothole Action Fund’ of £0.835 million and a Highways Maintenance Block fund of £12.076 million⁴⁰.
- **Local Growth Deal Funding**: A total of £71.1m of Growth Deal funding is available to the Worcestershire Local Enterprise Partnership for spending between 2016 and 2021⁴¹. The local Growth Deal Funding is explicitly linked to the delivery of housing and job growth within the area.
- **Section 106 agreements**: These will continue to be one of the primary mechanisms for funding infrastructure enhancements which are directly related, and demonstrably necessary to support development growth.
- **Community Infrastructure Levy**: The charging schedules and Regulation 123 Lists for each of the authorities outlines that small amounts of monies will be collected through the charging of Community Infrastructure Levy on certain types of development. Transport as an infrastructure type is included on the

Regulation 123 List, and the Appendix A2 which accompanies the list outlines that CIL can be spent on “*Strategic, county wide sustainable transport improvements for walking, cycling, public transport and highways.*”

Summary and Conclusions

Since the preparation of the 2016 Infrastructure Delivery Plan, significant progress has been made in relation to identifying and collating transport schemes across the South Worcestershire area through the Local Transport Plan 4 and the Rail Investment Strategy. In addition, WCC have identified that progress has been identified against these schemes, which has been detailed in Appendix A1.

In relation to the proposed levels of growth, although further investigation is needed through the next stages of plan-making, concern has been raised by both Highways England, in relation to the level of growth planned at Parkway for which there is a predicted significant impact, and by Network Rail in relation to the cumulative impact of demand arising from development at Ashchurch, Throckmorton and Worcestershire Parkway. The infrastructure response to this growth will be developed as the Plan progresses and schemes will need to be included within the schedule.

The chapter will also require update once the outcomes of the Transport Study commissioned to assess the implications of the draft sites has been concluded.

³⁸https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/765680/mrn-investment-planning-guidance.pdf?_ga=2.165256639.185148631.1566909001-948817794.1536324228

³⁹https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/597935/Worcestershire_Factsheet.pdf

⁴⁰https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/757950/roads-funding-information-pack.pdf

⁴¹https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/597935/Worcestershire_Factsheet.pdf

Infrastructure Assessment: Utilities

5 Infrastructure Assessment: Utilities

Responsibility for delivery

Table 7 Responsibilities for Delivery

Electricity	The main electricity provider for the Worcestershire area is Western Power Distribution (Western PD). As a regional Distribution Network Operator (DNO), they are responsible for distributing electricity from the national transmission cables to houses and businesses in the region. They are required to produce a Long-Term Development Statement (LTDS) to detail the nature of any current or future work.
Gas	The high-pressure gas transmission system in the UK is owned by National Grid. A high-pressure gas transmission line is located to the south of Worcestershire, close to both Evesham and Upton. The Worcestershire area is on the boundary between two DNOs, Wales & West Utilities and Cadent.
Water	The South Worcestershire IDP is located within the supply area of Severn Trent water. Worcestershire sits within the Strategic Grid Resource Zone (RZ).
Wastewater	Severn Trent is also the wastewater provider for the Worcestershire area. Wastewater is collected in private drains which feed into public gravity fed lateral drain sewers and local pumping stations. Wastewater can be drained either as separate foul and surface water runoff, or traditionally as a combined system.
Renewable Energy	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 2016 IDP

Literature, Policy and Strategy Changes

The previous iteration of the IDP outlines that, as of April 2016, there is an estimated 115 megawatts of large-scale renewable electricity capacity in Worcestershire, alongside sufficient capacity in the electricity transmission system. However, the 2016 IDP highlights that there are constraints in the

electricity distribution system that would require upgrades, and may limit development growth if not addressed.

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)⁴²: 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 acting 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; developing 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.

Worcestershire Energy Strategy 2019-2030⁴³: This overarching strategy for energy in the county outlines three key aims: reducing carbon emissions by 50%, doubling the size of the low carbon sector, tripling renewable energy generation, all by 2030. The strategy sets out the challenges of addressing fuel poverty and how the low carbon and renewable energy sector can help to achieve the goals of the Worcestershire LEP's Strategic Economic Plan by growing GVA and creating new jobs. Other objectives include promoting low carbon transport and addressing grid capacity challenges.

⁴²Dept. 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

⁴³ Worcestershire LEP (2018) Worcestershire Energy Strategy 2019-2030. Available: <https://www.wlep.co.uk/wp-content/uploads/P3695-Worcestershire-Energy-Strategy-Strategy-with-glossary.pdf>

Assessment of Current Infrastructure Provision

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.

South Worcestershire 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.

Figure 2 shows Western PD's electricity distribution network within the South Worcestershire area. The locations of the proposed strategic site allocations and the main settlements with a proportion of growth are marked indicatively in blue on for context. Western PD receive the electricity from National Grid at Grid Supply Points, which step the voltage down to 132kV. Their network supplies Bulk Supply Points which reduce to voltage to 66kV (typical in South Worcestershire) or 33kV. This 66kV network then disperses the electricity supply to local Primary substations. Primary substations (66kV 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 South Worcestershire.

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 a local primary substation to supply their own secondary substations. Often these primary substations generally pose the biggest obstacle to developments, as the triggering of works to upgrade or provide new primary substations can result in high costs to the developer. In extreme cases, where

developments are particularly large or energy intensive, an individual primary substation may be required, supplied by the 66kV network.

Western PD have several primary substations in proximity to the localities within this study:

- Pershore
- Evesham
- Droitwich
- Tenbury
- Brotheridge Green
- Warndon
- Malvern
- Bevington

Western PD, like all regional DNOs, operate a first come, first serve basis for electricity. 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.

In an attempt to reduce the demand on their network, Western PD have introduced Active Management Systems (AMS) where there are multiple complex constraints restricting capacity upgrades. Feckenham Bulk Supply Point (BSP) group, which supplies South Worcestershire, is an active AMS area and operates a Last In, First Out (LIFO) hierarchy. This prioritises the oldest connections when issuing capacity but can offer lower connection costs for new connections. This system is typically suited to industry which can operate with backup generation or downtime when there is no electricity supply, rather than residential developments.

There are currently areas of the electricity network which are constrained for both electricity generation and/or demand. Coordination with Western PD/National Grid would be required to identify ideal locations for sustainable energy generation in South Worcestershire which could supply the proposed developments, and the potential upgrades required.

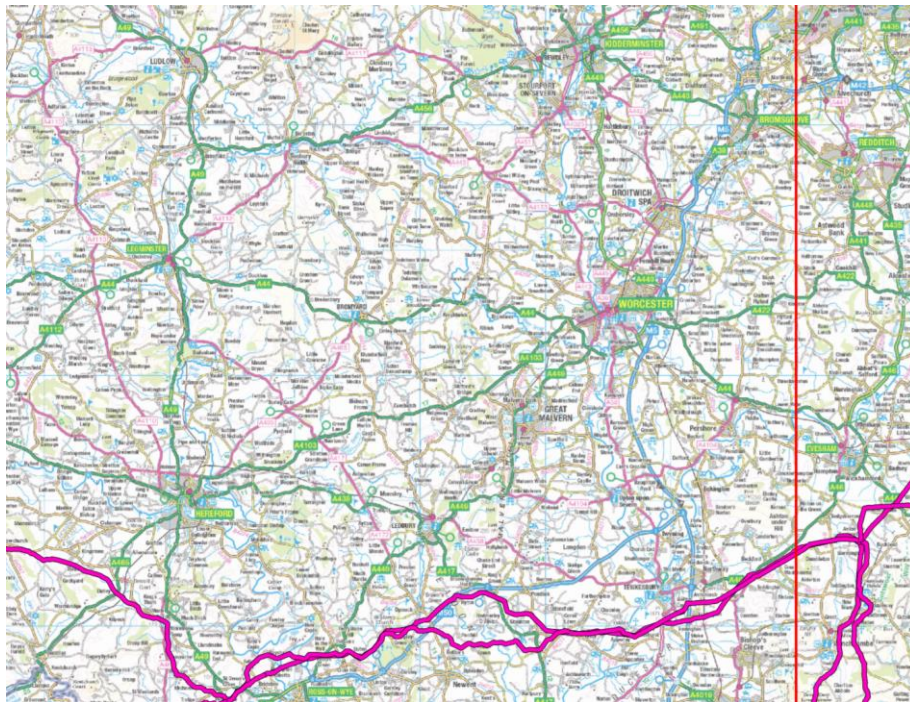
A map showing the location of Lenbury. It is situated south of Brimfield and west of Lenox. Other nearby towns shown include Orleans and Haverhill. A blue circle highlights Lenbury.

Gas

National Grid National High Pressure (NHP) transmits gas mains gas throughout the UK at a pressure of up to 85bar. DNOs receive high-pressure gas from National Grid's transmission pipelines. 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.

Figure 3 shows the extent of the high-pressure gas transmission in the South Worcestershire area.

Figure 3 National Grid High Pressure Transmission network in proximity to South Worcestershire



(Source: National Grid Gas)

South Worcestershire is on the boundary between two DNOs: Wales & West Utilities and Cadent. The breakdown of each location gas DNO is provided in **Table 8**.

Table 8 DNO for each of the proposed development locations

Development Location	DNO Supplier
Evesham	Wales & West
Pershore	
Throckmorton	
Worcester City	Cadent
Upton	
Malvern	
Rushwick	
Worcester Business Park	
Worcester Parkway	
Droitwich	
Tenbury	

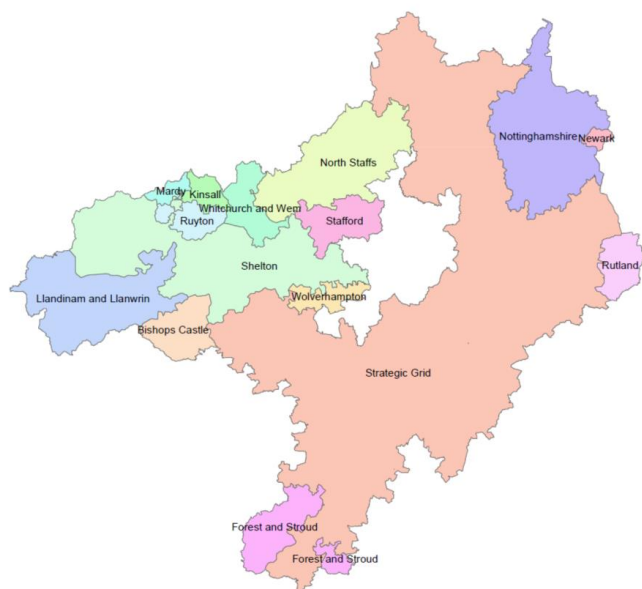
Both Wales & West Utilities and Cadent are required to produce LTDSs in order to forecast their demand and supply for the next ten years. In their LTDS, both DNOs have plans to substantially increase their supply capacity, as they forecast a slight decrease in future gas demand due to less favourable economic outlook, increase in UK gas prices and the increase in renewable energy. However, they do note that a rise in popularity of Combined Heat and Power plants (CHP) and the developments of these may lead to shortages within their network.

Both DNOs are focussed on diversifying their supply to include biomethane and hydrogen, in response to the call for reduced carbon emissions. Changes to the pressure and type of fuel may impact on the peak behaviour in their network, however these affects are still largely unknown.

Water supply

South Worcestershire is located within the supply area of Severn Trent Water. South Worcestershire sits within their Strategic Grid Resource Zone (RZ) as shown on Figure 4, which is the largest resource area within the Severn Trent catchment.

Figure 4 Severn Trent potable water Resource Zones (Source: Severn Trent Water)



The Strategic Grid RZ supply includes multiple reservoirs, as well as river abstractions on the Severn, Trent and Avon. There are Water Treatment Works (WTWs) in proximity to the proposed developments at Strensham and Mythe. Water is distributed throughout the IDP area through large trunk mains and smaller distribution mains.

Severn Trent's 2018 Water Resources Management Plan sets out goals to increase the capacity, scale and resilience of the Strategic Grid RZ, through building connections with their other catchments and between other DNOs service areas. They also identify the need to increase the capacity of their

surface water abstraction in order to meet the increasing demands from rising populations and the phasing out of unsustainable groundwater abstraction methods. Short term water savings are to be achieved through leakage reduction and efficiency programmes.

Wastewater

Severn Trent is also the wastewater provider for the South Worcestershire area. Wastewater is collected in private drains which feed into public gravity fed lateral drain sewers and local pumping stations and is treated at Sewage Treatment Works (STW). Although traditionally treated as a combined system foul and surface water system, modern developments should dispose of surface water sustainably and only foul water entering Severn Trent's wastewater network.

Severn Trent have plans to increase the capacity of multiple STWs within the Strategic Grid RZ, however the locations of these works are not publicly published, and so the impacts on the IDP developments are not known.

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

Overview and Assumptions

The distribution of growth set out within the Development 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 growth set out in the Preferred Options and utility unit demands based upon previous projects and professional judgement. The capacities of the networks have been determined from information provided by the utility providers in the area.

This chapter will require update once sites have been confirmed at the next Local Plan stage.

A number of assumptions have been made which influence the calculated utility demands:

- Average residential dwelling size of three bedrooms.
- Urban developments (>500 houses) will have heating split between gas and electricity (70% and 30% respectively), with apartments typically electrical heated.
- Small/rural developments (<500 houses) will have traditional gas heating.
- 30% of employment gross site area is net developable area.
- Employment split: 40% offices, 20% general industrial, 40% warehouses.

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.

Demand for 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 building 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 summers afternoon. The electrical demand for these scenarios is provided in **Table 9**.

Table 9 Proposed Electricity Demands

Location	Electricity (MVA)	Diversified Electricity: Summer Afternoon (MVA)	Diversified Electricity: Winter Evening (MVA)
Parkway	21.9	14.6	19.8
Throckmorton	6.4	3.5	6.0
Rushwick	3.2	1.8	3.0
Worcester City	5.1	3.2	4.6
Worcester Business Park	6.1	5.9	4.8
Droitwich	5.0	4.1	4.3
Evesham	3.7	3.4	3.0
Malvern	7.5	6.3	6.3
Pershore	10.0	8.9	8.2
Tenbury Wells	0.2	0.1	0.2
Upton	0.2	0.1	0.2
Rural housing	3.9	1.6	3.9
Total	73.3	53.5	64.3

Substation Capacity Assessment: Developments are typically served by their nearest primary substation, subject to the 11kV network configuration. Table 10 sets out the electrical demands for the developments, and which substation these will likely be supplied by.

Table 10 Substation Capacities

Location	Diversified Electricity-Summer Afternoon (MVA)	Diversified Electricity-Winter Evening (MVA)	Total Demand (MVA)	Nearest Primary Substation	Available Capacity (MVA)	Surplus / Shortfall (MVA)
Evesham	3.4	3.0	3.4	Evesham 66/11kv	7.2	3.8
Pershore	8.9	8.2	8.9	Pershore 66/11kv	0.9	-8.0
Throckmorton	3.5	6.0	6.0	Bevington 66/11kv	10.4	4.4
Rushwick	1.8	3.0	32.2	Warndon 132/11kv	35.7	3.5
Worcester Business Park	5.9	4.8				
Worcester Parkway	14.6	19.8				
Worcester City	3.2	4.6				
Upton	0.1	0.2	0.2	Brotheridge Green 66/11kv	0.6	0.4
Malvern	6.3	6.3	6.3	Malvern 132/11kV	11.0	4.7
Tenbury Wells	0.1	0.2	0.2	Tenbury 33/11kv	10.0	9.8
Droitwich	4.1	4.3	4.3	Droitwich 66/11kv	16.7	12.4
Additional Rural	1.6	3.9	3.9	Unknown	N/A	N/A

For each substation, the greater diversified demand has been taken as the 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 the table.

- **Evesham:** Evesham primary substation is forecast to have sufficient available capacity to supply the developments in this locality.
- **Pershore:** Pershore primary substation has minimal available capacity, sufficient to support circa 500 homes with no capacity for employment uses. It is likely that some early employment growth within Pershore can be supported by Bevington primary, although upgrades are likely required for the later developments. It could be cost prohibitive to provide a new primary substation (c. £5-10M) at Malvern which would have a capacity far greater than the required demand, however discussions with Western PD suggest that strategic upgrades will be required: *“The transformer capacity at Pershore is presently limited by voltage regulation, the capacity of the site could be increased without the need of changing the transformers (to ~23MVA), however there would be a requirement to reinforce 66kV circuits, or install a device that boosts the voltage. Regarding Bevington, transferring demand onto that primary could be done in principle, however, this would trigger voltage issues further downstream of the network.”*
- **Throckmorton Airfield:** Bevington primary substation is forecast to have sufficient capacity to supply the proposed Throckmorton developments, with additional surplus capacity available.
- **Rushwick and Worcester:** Warndon primary substation is forecast to have sufficient available capacity to respond to planned growth, however it is likely that upgrades to Western PD’s network would still be required to respond to any windfalls.
- **Upton-upon-Severn:** Brotheridge Green primary substation is forecast to have sufficient available capacity to supply the proposed housing and employment development in Upton.

- **Malvern:** Malvern primary substation is forecast to have sufficient available capacity to support the proposed Malvern developments.
- **Tenbury Wells:** Tenbury primary is forecast to have sufficient available capacity to supply the developments in this locality.
- **Droitwich:** Droitwich primary is forecast to have sufficient available capacity to supply the developments in this locality.
- **Rural:** The proposed level of growth within the rural areas do not total an insignificant demand, and so the locations of these should be confirmed early where possible to allow the networks ability to support them to be assessed. Depending on their chosen locations, additional network upgrades may be required.

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.

It is possible for development sites to have an independent private electrical supply through sustainable sources such as private wire from CHP or solar PV. As resilience to the loss of energy supply is lower for electricity than heating, a backup 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. This would result in an increased demand of approximately 30MVA which is highly unlikely to be able to be accommodated by the existing electricity network. Therefore, significant upgrades are required or alternative schemes proposed to achieve this.

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 those shown in **Figure 3**, particularly 132kV tower relocations. Instead, these assets should be retained where possible, and their easements incorporated into the masterplan, utilising this space as road corridors and parks. This is likely to be the case for developments to the south-east of Evesham, where there is a significant amount of existing infrastructure. Western PD noted that they are open to further discussions regarding easements on a site by site basis.

Demand for Gas

An estimate of the gas demands (**Table 11**) has been made for the proposed developments.

Table 11 Proposed Gas Demands

Location	Gas (MW)
Parkway	32.6
Throckmorton	8.9
Rushwick	4.5
Worcester City	7.4
Worcester Business Park	10.5
Droitwich	8.1
Evesham	6.7
Malvern	12.2
Pershore	16.7
Tenbury Wells	0.5
Upton	0.5
Rural housing	10.1
Total	118.8

This results in an increase in demand across South Worcestershire of approximately 31.5MW within Wales & West's catchment and approximately 76.3MW within Cadent's catchment.

Typically for gas supply, constraints are associated with general distribution issues such as network expansion and local upgrades, rather than the overall capacity of the system. Both Cadent and Wales & West in their LTDSs forecast a plateau and then overall reduction in demand in the future due to the increasing efficiency in appliances and homes despite growing populations.

In order to meet the challenges of decarbonisation, gas networks are developing their vision for the low-carbon future. Wales & West Utilities in the short term aim to introduce biomethane connections to increase the volume of 'green gas' in their network⁴⁴.

Therefore, at a strategic district wide level it is likely that the DNOs can supply the proposed developments, however there may be some localised network upgrades required. Specifically:

- Cadent Gas have reiterated that there is currently capacity on the MP / IP network for most of the developments below which are fed by Cadent. The only areas which cause concern, and which could potentially require reinforcement would be around the Malvern and Worcester areas. The reinforcement options will be looked into once a formal connection request is sent, particularly as the information on future loads can change available capacity.
- Wales and West have been contacted to understand implications on the network.

Usually, all costs associated with connecting new developments to an existing gas network are funded by the developer, however some of the costs for network reinforcement may be apportioned to the provider.

Alternative heating schemes (such as electricity, Energy from Waste or CHP) could be pursued to reduce the resilience on the gas grid network. This would have sustainable benefits in addition to potential cost saving for occupiers.

Through the aims of the Worcestershire Energy Strategy, to increase the low carbon energy offering of Worcestershire, there is the potential for future residents to benefit from access to affordable, clean energy. These could either

be on an individual development scale, as district heating across a neighbourhood, or through the decarbonisation of the electricity and gas networks.

Potable Water

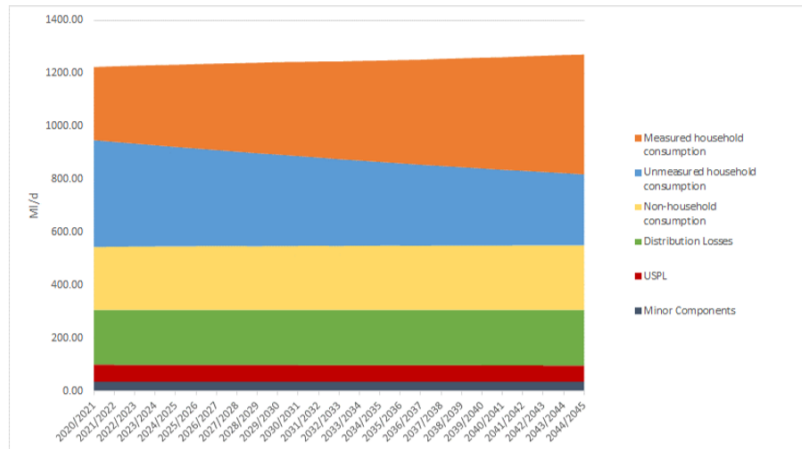
An assessment of the estimated potable water demands is set out in Table 12.

Table 12 Proposed Water Demands

Location	Potable Water (m ³ /day)
Parkway	1597
Throckmorton	602
Rushwick	301
Worcester City	405
Worcester Business Park	94
Droitwich	229
Evesham	110
Malvern	292
Pershore	306
Tenbury Wells	35
Upton	35
Rural housing	680
Total	4686

Table 12 forecasts that a total potable water demand of 4.7Ml/day will be required by the proposed developments. Across their Strategic Grid RZ, Severn Trent forecast an overall increase in potable water demand (**Figure 4**) due to factors including population growth and new developments. As this IDP requires far less than that forecast, it is unlikely that there will be strategic supply issues for the specific development.

⁴⁴ W&W and Cadent LTDS (2018)

Figure 5 Projected total increase in water demand for Strategic Grid RZ (Severn Trent Water)

Following consultation with Severn Trent Water Limited (STWL), it is understood that there has not currently been an assessment of the potable water network. This modelling would be undertaken on a more detailed site by site basis, as the sites are progressed further by individual developers as part of the Asset Protection process. As the potable water supply network is a pressurised system, STWL do not envisage that there would be issues to connect to new developments.

As part of the Water Cycle Study assessment completed by JBA earlier this year, an assessment was undertaken which included the proposed 30,553 dwellings planned for South Worcestershire between 2016-2041 and there were no concerns regarding meeting the increase in demand from the current SWDP to the revised SWDP. In the WRMP there are plans in place to meet the increased demand that was assessed as part of the process⁴⁵.

⁴⁵ <https://www.severntrent.com/about-us/future-plans/water-resource-management/wrmp-19-documents/>

Wastewater

The peak foul generation for each locality has been estimated for each settlement, as shown in Table 13 alongside Severn Trent's comments regarding the impact these flows would have on the Sewage Treatment Works (STW) which serve them.

Table 13 Proposed Foul Generation

Location	Water (m ³ /day)	Foul (m ³ /day)	Sewage Treatment Works	Sewage Treatment Works (STW) comments
Parkway (new settlement)	1597	1517	Worcester - Bromwich Road STW	There are options available for different STW as flows can either drain to Worcester, Kempsey or Powick, but the most likely option at present is Worcester. Capacity upgrades are due in 2020-2025 to account for existing planned growth to the Worcester Catchment. Additional capacity upgrades may be required to accommodate further growth.
Throckmorton	602	572	Pershore STW	The nearest STW at Throckmorton is very small, therefore flows would be expected to drain into the Pershore catchment. There is very limited capacity at this STW and significant capacity improvements are likely to be required to accommodate development in Throckmorton and Pershore.
Rushwick	301	286	Worcester - Bromwich Road STW	Capacity upgrades are due in 2020-2025 to account for existing planned growth to the Worcester Catchment. Additional capacity upgrades may be required to accommodate further growth.
Worcester City	405	385	Worcester - Bromwich Road STW	Capacity upgrades are due in 2020-2025 to account for existing planned growth to the Worcester Catchment. Additional capacity upgrades may be required to accommodate further growth.
Worcester Business Park	94	90	Worcester - Bromwich	Capacity upgrades are due in 2020-2025 to account for existing planned growth to the Worcester

Location	Water (m ³ /day)	Foul (m ³ /day)	Sewage Treatment Works	Sewage Treatment Works (STW) comments
			Road STW	Catchment. Additional capacity upgrades may be required to accommodate further growth.
Droitwich	229	217	Droitwich - Ladywood STW	Capacity upgrades are likely between 2020-2025 to account for existing planned growth to the Droitwich catchment. Additional capacity upgrades may be required to accommodate further growth.
Evesham	110	105	Evesham STW	There is some spare capacity at this STW.
Malvern	292	277	Malvern STW	Improvement works are planned 2020-2025 to meet new Phosphorous permit. There is some existing hydraulic capacity to meet existing planned growth. Additional capacity upgrades may be required to accommodate further growth.
Pershore	306	291	Pershore STW	The nearest STW at Throckmorton is very small, therefore flows would be expected to drain into the Pershore catchment. There is very limited capacity at this STW and significant capacity improvements are likely to be required to accommodate development in Throckmorton and Pershore.
Tenbury Wells	35	33	Tenbury STW	There is some spare capacity at this STW.
Upton	35	33	Upton on Severn STW	There is limited capacity at this STW, capacity improvements may be required to accommodate development in this catchment.
Rural housing	680	646	Multiple	Generally – rural settlements drain to small STW and a significant increase in the population in a catchment is likely to have a high impact upon the STW. It is also more likely that these STW discharge into small watercourses with lower flows which may mean there are environmental restrictions to obtaining higher discharge permits. It is more cost effective for development to be clustered around existing larger settlements so that capacity upgrades can be focussed at a few larger works than many smaller ones.
Total	4686	4452		

The total foul wastewater generated by the proposed demands is approximately 4.5Ml/day.

The Water Cycle Study states that the foul networks surrounding Worcester, Malvern, Pershore, Droitwich, Upton, Rushwick, Throckmorton and Worcester Parkway do not currently have the wastewater infrastructure to accommodate the additional flows proposed. This reflects the presence of sewer flooding, CSO (Combined Sewer Overflow) spills or pollution events in the vicinity of the site and the assumption that an increase in wastewater flows from developments would make those occurrences more likely in the future. These are not ‘showstopper’ constraints but identify where the newest infrastructure or network reinforcement will be required. The Water Cycle Study records that the networks surrounding Upton may require upgrades, whilst networks serving Evesham should have sufficient capacity to support the proposed developments.

It should be noted that Severn Trent have a statutory duty to serve new developments under the Water Industry Act 1991 for wastewater.

Existing Infrastructure

Within the proposed developments sites, there may be existing utility transmission and distribution infrastructure which can pose as a constraint. Where this is a strategic asset, such as 132kV OHLs, it can be cost prohibitive to divert these. Instead this infrastructure could be retained with as easement and incorporated into the site masterplan as a corridor for roads, cycleways and parks. It may be more cost beneficial to divert smaller mains to suit the proposed scheme.

Once development sites are confirmed, consultation with the relevant DNOs can steer these decisions before formal diversion quotations are submitted.

Renewable Energy

The 2016 South Worcestershire development plan specifies that any development over 100m² of GFA should incorporate renewable or low carbon energy generation for at least 10% of the energy requirements, unless this would make the development unviable. The plan also suggests that large scale

developments (>100 dwellings or >10,000m²) should consider the potential of a decentralised energy and heating network as part of the development.

These schemes would therefore have the ability to reduce the demands calculated in this assessment, and potentially avoid expensive network upgrades.

Summary and Conclusions

In relation to each utility type, the following issues have been raised in relation to the proposed levels of growth:

- **Electricity:** Pershore primary substation has minimal available capacity, sufficient to support circa 500 homes with no capacity for employment uses. Depending on the chosen locations for growth in the rural areas, additional network upgrades may be required. Demand could be increased through measures to decarbonise the grid (i.e. through electric heating or EV charging points), and therefore this will require ongoing monitoring.
- **Gas:** At a strategic district-wide level, it is likely that the District Network Operators can supply the proposed development, however there may be some localised network upgrade necessary.
- **Potable water:** Across their Strategic Grid RZ, Severn Trent forecast an overall increase in potable water demand (**Figure 4**) due to factors including population growth and new developments. As this IDP requires far less than that forecast, it is unlikely that there will be strategic supply issues for the specific development.
- **Wastewater:** The Water Cycle Study states that the foul networks surrounding Worcester, Malvern, Pershore, Droitwich, Upton, Rushwick, Throckmorton and Worcester Parkway do not currently have the wastewater infrastructure to accommodate the additional flows proposed

This chapter will require update post-consultation, to provide feedback on individual sites, and all statutory consultees have provided feedback to the IDP.

Infrastructure Assessment: Flood Risk

6 Infrastructure Assessment: Flood Risk

Responsibility for delivery

The 2016 IDP established that responsibilities for delivering flood risk infrastructure was complex, with various bodies having statutory and non-statutory responsibilities dependent on the type of flood risk or watercourse. These are set out within **Table 14**.

Overview of changes since the 2016 IDP

Literature, Policy and Strategy Changes

A number of plans and strategies relating to Flood Risk Management have been published since the 2016 Infrastructure Delivery Plan. These changes are predominantly focussed around an intention to establish a more coordinated and proactive, aligned approach to investing in the right flood risk infrastructure and being more efficient and integrated between strategic plans of different organisations.

Revised National Planning Policy Framework (2019): The revised NPPF continues to direct 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’*.

Draft National Flood and Coastal Erosion Risk Management Strategy for Consultation (May 2019): Since the 2011 FCERM Strategy was prepared, there have been changes to climate change flood modelling, the 25-year Environment Plan was prepared by DEFRA and Long-Term Investment Scenarios were prepared by the Environment Agency. Although subject to the outcomes of consultation, the draft 2019 Strategy endorses a shift towards working with natural processes to develop natural flood management and using flood risk to support sustainable development. This will include place-based resilience measures (SuDs, flood infrastructure, property-level resilience etc.) alongside environmental net gain scenarios.

Table 14 Responsibilities for Delivery and Risk Management Authorities

Department for Environment, Food and Rural Affairs (DEFRA) is responsible for outlining a national policy approach, as well as providing some funding. The Risk Management Authorities are responsible for delivering these policies.
The Environment Agency supports a strategic overview of all sources of flooding and coastal erosion. The Environment Agency’s role therefore includes determining a long-term approach to Flood and Coastal Erosion Risk Management, allocating central Government funding to specific projects and working with others to prepare Flood Risk Management Plans. Their responsibility covers the main rivers within the SWC and reservoirs .
Worcestershire County Council is the Lead Local Flood Authority (LLFA) established under the Flood and Water Management Act 2010 and statutory consultee for surface water in regard to surface water on major planning application. As LLFA, the County Council: • Develop, maintain and implement a Local Flood Risk Management Strategy which includes risks from surface water run-off, groundwater and ordinary watercourses. • Investigate all significant flooding incidents. • Maintain a register and record of flood defence assets. • Encourage use of sustainable drainage on new development. • Build partnerships and ensure effective working between authorities that have responsibility over flood risk.
The SWCs are individual Risk Management Authorities responsible for planning local flood risk management in their area. These can develop flood risk management works on minor watercourses, and work in partnership with LLFAs, the EA and landowners to ensure risks are managed effectively.
Water and Sewerage companies also have a major role in managing flood risk and coastal erosion risks. They manage the risk of flooding to water supply and sewerage facilities from the failure of their infrastructure.
The role of Internal Drainage Boards (IDBs) , such as the Lower Severn IDB which edges into the south of the SWC area, manage water levels for the protection of people, property and the environment.
Highways England have responsibility for managing highways water on trunk roads , whilst the Highways team and the County Council are responsible for non-trunk road water .

Flood and Coastal Erosion Risk Management Strategy (March 2019 Update): This is a national strategy, produced by the Environment Agency which seeks to reduce the threat of flooding and coastal erosion. Planned and completed capital schemes agreed by Regional Flood and Coastal Committees are set out within Appendix A3.

Strategic Flood Risk Assessment (JBA, September 2019): One of the more significant local changes since the 2016 IDP has been the publication of an updated Strategic Flood Risk Assessment (SFRA, 2019). The SFRA has been prepared in support of the production of the Plan Review and Preferred Option process and will be updated in advance of Plan publication.

In summary, the SFRA establishes:

- That the most significant sources of flood risk in South Worcestershire are fluvial and surface water, with specific settlements impacted by flood risk set out within **Table 15** overleaf;
- The principles of the Sequential Test, including where the Exception Test or Level 2 SFRA will be necessary, and where the cumulative impact of development will need to be managed;
- The need to assess the condition of existing drainage assets and ensure that the infrastructure can accommodate pressure / flows for the lifetime of the development and to implement Sustainable Drainage Systems (SuDs); and,
- The need to protect and promote areas for future alleviation schemes.

Table 15 SFRA (2019) identified flood risk within SWC

	Settlements Impacted	Worcester	Droitwich	Evesham	Malvern	Pershore	Tenbury Wells	Upton	Rural Areas
Type of risk									
Fluvial Flooding	Primary fluvial flood risk is along the River Severn, River Terme, River Avon and the tributaries of these rivers.								
Surface Water	Surface water flooding is most likely caused by intense rainfall, with flooding following overland flow routes and topographical flow paths of existing dry valleys.								Kempsey Bredon Westmancote Overbury Broadway. Breforton Crowle Elmley Castle
Sewer	Although managed by Severn Trent Water (STW) and Welsh Water, there are a large number of properties at risk of sewer flooding. Historical events of STW denoted.								
Ground water	In general, the SWC area is at lower risk of groundwater flooding. Although, there are localised areas of risk around the River Teme, the River Avon and River Severn. Limited historical flood events related to groundwater, but largely within Wychavon and are widespread throughout the District.								
Canals	Various incidences of overtopping and breaching at locations adjacent to the Birmingham Canal and Droitwich Canal.								
Reservoir	Although no recorded incidents, there is risk from reservoirs both within and outside the SWC area.								

Worcestershire Local Flood Risk Management Strategy (2016): In response to both the reformed responsibility of Worcestershire County as an LLFA and significant flooding events across the County in 2007, the Worcestershire County Council Local Flood Risk Management Strategy (2015- 2021) was adopted March 2016 and sets out the statutory duties on the County Council. The Local FRMS sets out actions for reducing the risk of flooding across the County Council area. There are emerging plans to update the LFRMS, however, discussions with WCC considered that changes are unlikely to be substantive.

Worcestershire Local Flood Risk Management Strategy (2016) Action Plan⁴⁶: This document sets out the actions planned by the LLFA and other Risk Management Authorities within Worcestershire over the next five years. Schemes within the Action Plan, which are still to be delivered, have been set out within Schedule at Appendix A3.

Worcestershire Surface Water Management Plan (June 2018): The Surface Water Management Plan sets out where 1,400 floodspots for which Worcestershire County Council, as the LLFA and the Highways Authority, or District Council is the lead Risk Management Authority. These surface water floodspots will be prioritised and introduced to the Regional Flood and Coastal Committee and its six-year programme in order to enable Local Levy and FDGiA contributions to be maximised. Early or Quick wins, where construction has started or has been completed, are at Tibberton, Droitwich Town Flood Risk Management Plan, Lower Moor in Pershore, Bransford and at Harvington.

Droitwich Town Flood Risk Management Plan: Following significant surface water flood risk issues in 2007, WCC are working with other RMA partners to produce a local Flood Risk Management plan to try and address the issues.

South Worcestershire Development Plan – Water Management and Flooding SPD (July 2018): The SPD sets out in detail the SWC approach to minimising flood risk, managing surface water and achieving sustainable drainage systems. The document provides additional detail to adopted policies within the South Worcestershire Development Plan:

- Policy SWDP 28: Management of Flood Risk;
- Policy SWDP 29: Sustainable Drainage Systems; and
- Policy SWDP 30: Water Resources, Efficiency and Treatment.

Sustainable Drainage Design and Evaluation Guide (Worcestershire County Council, 2018)⁴⁷: The Flood and Water Management Act (2010) made Lead Local Flood Authorities, such as Worcestershire County Council responsible for co-ordinating the management of surface water flood risk.

WCC as the LLFA require all development to provide SuDS for the management of surface water. It requires that surface water run-off should be controlled as near to its source as possible. The LLFA preference is for at-surface level SuDS features that should form part of an integrated and multi-functional green infrastructure network and which provide opportunities for biodiversity, open space and place-making opportunities. These should be developed through early engagement with the LLFA.

A minimum of 3.0m easements should be provided around SuDS features, and a minimum of 8.0m easement around any watercourse for maintenance access. This will also help protect and enhance the aesthetic and biodiversity features.

Water Cycle Study (SWC, May 2019): JBA have prepared a Water Cycle Study for the South Worcestershire Councils. This study assesses the potential issues relating to future development within South Worcestershire and the impacts on water supply, wastewater collection and waste water treatment. The Water Cycle Study is required to assess the constraints and requirements that will arise from potential growth on the water infrastructure.

Scheme Progress

Since the production of the IDP 2016, Badsey Brook Flood Risk Management Scheme has been completed. This £4.1million scheme reduces risks of flooding

⁴⁶ http://www.worcestershire.gov.uk/download/downloads/id/6509/flood_risk_strategy_-_appendix_1_action_plan.pdf

⁴⁷ http://www.worcestershire.gov.uk/download/downloads/id/10361/worcestershire_suds_design_and_evaluation_guide.pdf

for nearly 300 properties in Broadway, Childswickham and Murcot in Wychavon. The scheme was completed in October 2018.

In addition, the Flood Risk Management in Worcestershire Annual Report (2018) identified a number of flood alleviation schemes which have been delivered, including the Upton-Upon-Severn Flood Alleviation Scheme which was completed in 2019 and aimed to reduce flooding on key parts of the highway network. The scheme raised over 500 metres of the A4014 in the town by up to 0.8m. Other schemes are planned at Broadway, Severn Stoke, Worcester, Suckley, Cowleigh and Birlingham.

In addition, more than 60 highway surface water and drainage improvement schemes have also been completed over the last 12 months. This has included completion of the A44 New Road, Worcester and completion of Phase 1 and 2 of the A4104 Upton-upon-Severn. Both of these schemes are from the Worcestershire LEP-funded programme of larger scale capital highway flood adaptation. In addition, essential ongoing maintenance of highway drainage infrastructure has continued over the past 12 months, and the RMAs have assessed and commented on drainage plans of over 1,600 planning applications over the last 12 months.

Assessment of Current Infrastructure Provision

The South Worcestershire Council SFRA (2019) covers the existing fluvial and surface water risks within each of the main settlements and provides commentary on the existing defences within each area.

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

Current Planned Provision

FCERM Capital Investment Schemes (2015-2021): Planned Schemes are established within the Flood and Coastal Risk Management Capital Investment Programme (2015-2021), which sets out an agreed list of schemes supported by regional flood and coastal committees to support this collaboration. Work on projects expected to start after 31 March 2021 is still to be agreed⁴⁸.

As set out within the literature review since the 2016 IDP, there are a significant number of flood management schemes within the pipeline. Current planned provision (and the sources of the schemes) is set out in Appendix A3.

Scheme Identification

Using existing schemes, historic flood risk and predicted flood risk, the 2019 SFRA prepared by JBA consultants sets out the levels of risks associated with each catchment and where the cumulative impact of development may have the most significant effect:

- **Rushwick:** This area exists broadly within the Medium Risk Cumulative Impact area associated with the Laughern Brook.
- **Worcester Parkway:** The area exists within the High-Risk Cumulative Impact area associated with Worcester Parkway.
- **Evesham:** The north of the settlement is located within the 'Low Cumulative Impact' area, whilst the south is within the 'Medium Cumulative Impact' area. The area beyond the settlement to the west is located within the 'High' area and within the Merry Brook.

⁴⁸ <https://www.gov.uk/government/publications/flood-and-coastal-risk-management-in-england-long-term-investment/long-term-investment-scenarios-ltis-2019>

- **Pershore:** The eastern and north portions of the settlement are within the ‘Low Cumulative Impact’ area, however broadly to the west of the A4104 exists within a ‘Medium Risk’ area.
- **Upton-Upon-Severn:** This area exists broadly within the Low Cumulative Impact Area, however the area to the south of A4104 was considered to be within the ‘Medium Risk’ area.
- **Droitwich, Malvern, Tenbury Wells, Throckmorton:** Settlements are located within a ‘Low Cumulative Impact’ risk rating of catchments and schemes.

The SFRA identifies a series of risk-based catchment areas, and establishes the following:

- For the Piddle, Ripple and Stoulton Brook and medium-risk catchments the recommended policy is to incorporate SuDS, demonstrate how flood risk will be reduced downstream through Flood Risk Assessments and Surface Water Drainage Strategies as a means to provide wider betterment and to identify areas of land that should be safeguarded for the future use of natural flood management features;
- For the high-risk catchments (i.e. Barbourne Brook), additionally requires a Surface Water Drainage Strategy which will be reviewed by the LLFA and a recommendation to designate a Critical Drainage Area; and,
- For rapid response catchments (i.e. Dick, Badsey and Merry Brook) in addition to the medium risk catchment requirements, recommends that development includes design principles which respond to the rapid response nature of the catchment.

For new development, the SFRA requires:

- A Sequential Test and Exception Test for draft Site Allocations, including requiring managed site design to reduce areas of risk and a Level 2 SFRA for where the ability to provide adequate floodplain compensation is questionable.
- All new settlement should be accompanied by an overall Surface Water Management Masterplan and Strategy, and a Drainage Phasing Plan should be

prepared. Both of these documents should be prepared in consultation with the LLFA, the Environment Agency and LPA.

- Implementation of SuDS as standard on all developments.
- Assess the condition of existing drainage assets and upgrade these as necessary and contribute to reducing flood risk off-site wherever feasible.
- Safeguard locations for flood alleviations schemes and improve both emergency planning and awareness of flood risk.
- Maintain and enhance natural drainage features, including enhancing and restoring river corridors and habitats.

Sector-specific Funding

There is an increasing awareness that funding available for flood risk management is not going to be sufficient to address all existing risk and increasing future risk brought about by climate change. Indeed, based on the revised UK Climate Projections in November 2018, the Long-Term Investment Scenarios (LTIS) 2019 covers a range of long-term investment scenarios and sets out the total required national level of investment if investment takes place in all areas where benefits are greater than costs. By taking into account the targets of the 25 Year Environment Plan which seeks to limit average temperature rise to well below 2C, new evidence indicates that the optimum level of investment is higher than previously estimated, and the long-term annual average is over £1 billion.

Flood Defence Grant in Aid and Partnership Funding: Alongside managing the level of development within areas at flood risk, there is an expectation that emerging flood risk management schemes will require partnership funding in order to be deliverable. This could include securing local match funding such as contributions from local authorities, local beneficiaries and funding streams such as the SEP Local Growth Fund, New Homes Bonus, CIL and s106.

Local Levy Funding: The level of contribution is calculated by a formula based on the number of ‘Band D’ council tax properties within the LLFA boundary.

The total levy pot is then distributed to a number of flood alleviation through the RFCC.

Developer Contributions SPD (October 2016) Flood Risks and Surface Water Management Contributions: Where a development requires the provision of defences to mitigate residual flood risk, the developer will be expected to provide these directly or pay for the timely completion of the necessary works.

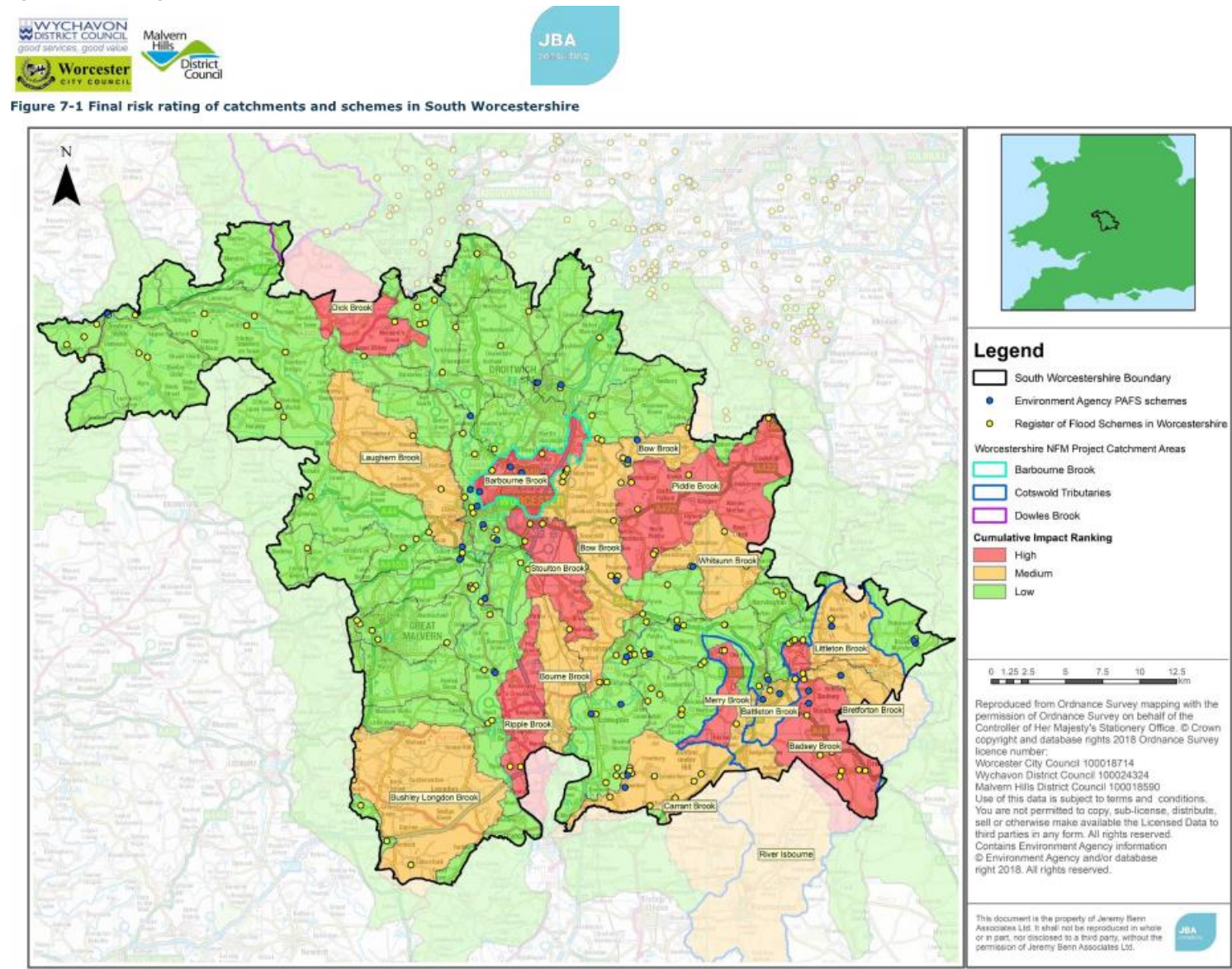
Community Infrastructure Levy (April 2017): Beyond schemes identified within S106, the Regulation 123 list includes for the provision, expansion, improvement, or replacement of new and existing flood mitigation measures (including flood risk management infrastructure).

Summary and Conclusions

Since the 2016 IDP, a Strategic Flood Risk Assessment and Water Cycle Study has been prepared which has informed the South Worcestershire Development Plan. The SFRA assigns 'risk ratings' to each of the catchments in South Worcestershire and establishes different requirements for each catchment.

Further consultation will be necessary with the Environment Agency following the Local Plan consultation to confirm the acceptability and infrastructure response for specific sites.

Figure 6 Risk rating of catchments and schemes in South Worcestershire (Source: JBA 2018, SFRA)



Infrastructure Assessment: Telecoms

7 Infrastructure Assessment: Telecoms

Overview and Responsibilities for Delivery

The telecommunications sector is a cornerstone of our modern economy. Today, the digital economy in the UK is worth more than £120 billion annually⁴⁹; with the Department for Digital, Culture, Media and Sport⁵⁰ identifying that improved connectivity supports the performance of local firms, overall productivity of smaller firms, increases higher-value employment and allows business to grow their markets while allowing individuals to work from home.

With an ever-growing demand for better connectivity, faster and more reliable coverage is needed⁵¹. The report, titled *Evaluation of Economic Impact and Public Value of Superfast Broadband Programme* (2018) states that increased connectivity enables greater use of the internet to support education and increased wellbeing. Whilst the development and roll-out of transformative technologies relying on greater bandwidths were only at a nascent stage in the 2016 Infrastructure Delivery Plan, it was acknowledged that superfast roll-out has the opportunity to accelerate the development and adoption of these technologies.

Table 16 Responsibility for delivery

Broadband

Telecom infrastructure includes several types which cover different use cases. BT have a universal service obligation (USO) to provide telephone connections and compete with other private companies to offer telephone and broadband internet services. BT/Openreach is the main broadband infrastructure provider in the county.

WCC, in partnership with BT/Openreach and the Government's Broadband Delivery UK, are working on improving the fibre broadband network in the county through the 'Superfast Worcestershire' programme. Superfast broadband is defined as 24 Mbps or above.

By March 2020, Ofcom has confirmed that everyone in the UK will have a legal right to request a decent and affordable broadband connection of a download speed of 10 Mbit/s and an upload speed of 1 Mbit/s.⁵²

Within the UK, broadband telecommunication services are provided by a range of internet service providers with the majority of residential and SME properties being served by one of the five major providers, BT, Sky, Virgin Media, Talk Talk or EE. These providers account for over 98% of broadband subscriptions.

Mobile

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 operators (MNOs) market which are EE, Three, O2 and Vodafone.

Overview of changes since the 2016 IDP

Policy and Literature Changes

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. Policies should set out how high-quality digital infrastructure and providing access to services from a range of providers is expected to be delivered and upgraded over time. 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)⁵³: This Plan identified that the Government's role is 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

⁴⁹ The Digital Communications Infrastructure Strategy, UK Government

⁵⁰ Department for Digital, Culture, Media and Sport (2018) *Evaluation of the Economic Impact and Public Value of the Superfast Broadband Programme*

⁵¹ The Digital Communications Infrastructure Strategy, UK Government

⁵² <https://www.ofcom.org.uk/phones-telecoms-and-internet/advice-for-consumers/broadband-iso-need-to-know>

⁵³ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/520086/2904569_nidp_deliveryplan.pdf

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 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 (DCMS, 2018): This research, commissioned by 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 signals⁵⁴.

The Future Telecoms Infrastructure Review (DCMS, July 2018)⁵⁵: 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.

⁵⁴https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/684421/OS_Final_report__5g-report-environment.pdf

⁵⁵https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/732496/Future_Telecoms_Infrastructure_Review.pdf

Broadband Europe: Digital Single Market (July 2019): Although dependent on the impact of Brexit, the European Commission has published a vision and policy actions to turn Europe into a Gigabit Society by 2025. The Commission's Strategy relies on three main strategic objectives for 2025:

- Gigabit connectivity to achieve the main socio-economic drivers;
- Uninterrupted 5G coverage for all urban areas and major terrestrial transport paths;
- Access to connectivity offering at least 100Mbps for all European households⁵⁶.

FTTP Targets (July 2019): In July 2019, the British Prime Minister announced proposals to increase full fibre coverage to all properties by 2025.

Analogue Telephony to Digital Voice Services & Plans for Copper Switch Off (March 2019): 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. In addition, it is understood Openreach are undertaking a wider industry consultation that includes options on how the copper network should eventually be retired.⁵⁷

Current Programmes and Schemes

Increasing Superfast Broadband across South Worcestershire has been a priority for Worcestershire County Council. This is outlined in the Worcestershire Local Broadband Plan 2012 (and addendums), and subsequently within the Worcestershire Local Enterprise Partnership (WLEP) through both the Worcestershire Strategic Economic Plan and the Worcestershire Growth Deal.

The programme has focussed on Superfast roll-out to up to 95% of premises across the whole county area as a means to achieving jobs, economic growth

⁵⁶ <https://ec.europa.eu/digital-single-market/en/broadband-europe>

⁵⁷ Openreach (March 2019) UK's digital transformation: Moving from line-based phone networks to internet-based networks)

and improving quality of life. Initial Worcestershire County Council and Building Digital UK (BDUK) investments have been supplemented by commercial contributions, reinvestment of Gainshare from the initial contract and securing further funding from the Worcestershire Growth Deal, European Regional Development Fund and DEFRA.

Programmes include:

- **Superfast Worcestershire:** The Superfast Worcestershire Partnership expects superfast broadband connectivity to be available at more than 97% of homes and businesses in Worcestershire by the end of 2020. Since the programme began, the Superfast coverage (24Mbps or above) across the county has increased from 69% of all premises to nearly 96% (July 2019). The coverage of fibre enabled business premises has also increased from 44% to over 90% across the county.

2016 Programme and extension: Worcestershire Council, BT, Broadband Delivery UK and Worcestershire LEP have secured extension to the Superfast Broadband Roll-Out programme for 2016-2021 and sought to provide improved broadband internet access to the rural areas of Worcestershire. The Extension Programme was introduced in 2016 and aimed to enable more than 8,000 additional homes and businesses to access high-speed broadband. The extension programme aimed to increase fibre access to more than 95%, with 94% of all premises in the county able to access superfast speeds⁵⁸.

2017-19 Programme and extension: Phase 3 was announced in November 2017 and will extend the project into 2020. This aims to connect a further 5,400 premises to superfast and ultrafast broadband. As announced in 2018, the programme has conditionally secured investment funding from Defra, of a further £1.5 million, announced in 2018. Planning is being finalised in Autumn

2019, with the expectation that approximately 1,000 premises will gain access to ultrafast broadband network in the county by the end of 2020.

To date, to complement the commercial deployment, the Superfast Worcestershire programme has already fibre-enabled nearly 600 broadband structures (fibre to the cabinet or fibre to the premises) meaning an additional 72,000 premises (approximate) are now able to 'sign-up' with their preferred internet service provider to obtain improved speeds.

Additionally, the programme has been supporting proactive communities and businesses in the remaining 3% through several schemes, including the Gigabit Voucher Scheme and the Rural Gigabit Connectivity Scheme.

- **Worcestershire 5G:** A part of the 5G Testbed and Trials programme at the Department of Culture, Media and Sport and the UK Government's drive to achieve Industry 4.0⁵⁹; the Worcestershire 5G Consortium will have the opportunity to increase industrial productivity through rolling out of 5G technologies⁶⁰ for businesses.

Worcestershire Local Enterprise Partnership (LEP) and the Worcestershire 5G Consortium began their year-long project to construct and operate 5G Testbed sites in Worcester and Malvern in March 2018. This project tests and develops 5G technology in Worcestershire, and includes local infrastructure providers, national network operators and research and development facilities. Having delivered on initial objectives, the project has since secured further extension funding.

- **Community Pathfinder projects⁶¹:** In collaboration with Airband, Worcestershire County Council has identified additional funding for the Pathfinder Community Projects. In South Worcestershire, this has included the North-West Malvern Consortium, comprising the parishes of Bockleton, Kyre, Hanley, Rochford, Eastham, Lindridge, Mamble and Bayton. This deployment

⁵⁸ <https://www.swdevelopmentplan.org/wp-content/uploads/2016/07/2016-SWIDP-UPDATE-FINAL.pdf>

⁵⁹ Worcestershire 5G Consortium and Worcestershire Local Enterprise Partnership, <https://uk5g.org/discover/research/worcestershire-5g-consortium-overview/>

⁶⁰ Worcestershire 5G Consortium and Worcestershire Local Enterprise Partnership, <https://uk5g.org/discover/research/worcestershire-5g-consortium-overview/>

⁶¹ http://www.worcestershire.gov.uk/info/20165/connecting_worcestershire_broadband/983/pathfinder_projects/2

of fixed wireless infrastructure (built in 2013) has provided improved broadband to very rural areas of Worcestershire, that were initially deemed unlikely to be covered by the initial deployment of Superfast Worcestershire. In 2020, the contract to provide these services will expire, however the supplier has indicated their intentions to continue the services commercially or consider moving to a fibre to the premises model, dependent on community interest.

Other nationally-available schemes promoted within Worcestershire include:

- **Gigabit Broadband Voucher Scheme:** From March 2018, DCMS announced a fund of £67m available for the Gigabit Broadband Voucher scheme. Under this scheme, businesses, 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)⁶².
- **Rural Gigabit Connectivity programme:** Since May 2019, this scheme is able to include those in rural areas. Vouchers up to £3,500 for SME and £1,500 for residents in rural areas are available if their current speeds are below 30 Mbps to bring their speeds to a minimum of 30 Mbps. For this scheme to apply, a minimum of two premises are to be connected. The £200 million scheme is set to run for 2 years with the Department for Digital, Culture, Media & Sport (DCMS) trialling a model connecting local hubs in rural areas, starting with primary schools.
- **Better Broadband Scheme:** Extended until December 2019, this programme is available to those who currently experience speeds below 2 Mbps and are not expected to benefit from Superfast Broadband within the next twelve months. Homes and businesses can claim subsidy of no more than £400 for basic broadband installation under this scheme⁶³.

- **Universal Service Obligation (USO):** The new USP will be primarily focussed upon helping to cater for those premises which are currently not likely to benefit from other superfast programmes⁶⁴.

Assessment of Current Infrastructure Provision

Broadband: Broadband is generally good within the largest settlements mostly achieving superfast speeds and occasionally ultrafast⁶⁵, however, whilst there have been significant improvements, coverage and speed are generally lower in rural areas, with the exception of areas that have benefited from full fibre to the premises deployment of the Superfast Worcestershire programme. The Government states that it committed to connecting those in rural areas and recognises the importance of well-connected rural communities⁶⁶.

Fibre broadband to the premises infrastructure is not available everywhere yet, and coverage is low; identified by WCC as being approximately 3%, against a nationwide coverage of approximately 8%. Whilst there is commercial investment in FTTP, overall coverage is notably low and rural areas are often most challenging for delivery⁶⁷ due to their smaller populations. Satellite, fixed wireless and mobile broadband are options for those who live in rural areas where traditional fixed-line based broadband services are not yet available⁶⁸. In the case of satellite broadband, it uses a satellite dish to provide two-way access to broadband services with theoretical download speeds of up to 20 Mbps. This is not superfast since speeds of 24 Mbps are not achieved⁶⁹.

Expanding coverage of 5G will also bring new opportunities to Worcestershire, however the only provider to announce commercial 5G plans in the county to date has only named the City of Worcester in their 2020 plans.

⁶² <https://www.superfastworcestershire.com/#news>

⁶³ <https://www.superfastworcestershire.com/complementary-schemes#bbs>

⁶⁴ <https://www.superfastworcestershire.com/complementary-schemes#bbs>

⁶⁵ [Checker.ofcom.org.uk/broadband-coverage](https://www.ofcom.gov.uk/broadband-coverage)

⁶⁶ The Digital Communications Infrastructure Strategy, UK Government

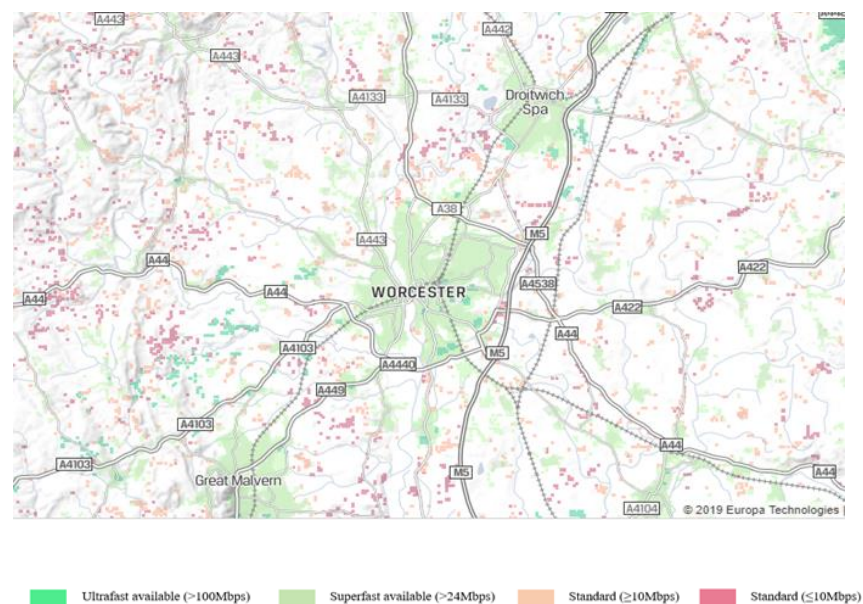
⁶⁷ The Digital Communications Infrastructure Strategy, UK Government

⁶⁸ [Superfastworcestershire.com](https://www.superfastworcestershire.com).

⁶⁹ [Superfastworcestershire.com](https://www.superfastworcestershire.com).

Table 17 Broadband Coverage across Worcestershire districts: July 2019⁷⁰

District	Superfast UK (>24 Mbps)	Ultrafast (>100 Mbps)	Full Fibre (FTTP or FTTH):
Bromsgrove	95.98%	28.21%	4.93%
Malvern Hills	88.93%	9.36%	4.64%
Redditch	99.03%	88.91%	1.27%
Worcester City	99.51%	3.57%	0.82%
Wychavon	94.03%	12.15%	4.74%
Wyre Forest	96.91%	52.14%	0.62%

Figure 7 Broadband Coverage and Speed in Worcestershire⁷¹⁷⁰ <http://labs.thinkbroadband.com/local/index.php?area=E10000034>⁷¹ <https://checker.ofcom.org.uk/broadband-coverage>

Mobile Provision: Mobile service coverage depends upon each providers infrastructure. Coverage can change drastically between different providers and can also depend on whether someone is indoor or outdoor while using their mobile phone. Mobile 2G, 3G and 4G services can be improved. This includes improving the coverage and optimising the network across the county⁷². Worcestershire Local Enterprise Partnership have appointed a provider to undertake a series of tests in the summer of 2019 to understand mobile phone signal coverage and identify issues in the county, these will be compared to results of a similar benchmarking exercise in 2017. The results of these tests are being used to engage and work with mobile network operators on their coverage levels in the county.

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

Planned Expansions

Discussions with both Worcestershire County Council and WLEP considered that, whilst continuing to look at opportunities, there were currently no publicly funded large-scale additional expansion programmes currently secured (beyond the completion of the Superfast Broadband Phase 3 including ‘Defra’ supported extension and schemes listed in ‘Schemes and Programmes’).

It should however be noted that Superfast Worcestershire continue to liaise with commercial operators – several full fibre providers have expressed interest in investing in Worcestershire. Whilst the suppliers are in the process of developing their plans, Superfast Worcestershire continues to encourage commercial investment as part of the ‘Open for Business’ agenda.

Airband, who now deploy a full fibre solution (FTTP) as well as wireless systems, are in the process of commercially deploying to c. 4,000 – 5,000 premises in the south of the Malvern Hills district, including Kempsey, Ryall,

⁷² superfastworcestershire.com/complementary-schemes#other

Upton upon Severn, Welland and Hanley Swan. This is likely to increase FTTP availability across Worcestershire by a further 1.5% - 2%.

In October 2018⁷³, the Government launched the "outside-in" approach which they propose will see most remote parts of the UK amongst the first to benefit, confirming £200m will be available. The Rural Gigabit Connectivity Programme is the first step in this process, with funding coming from the National Productivity Investment Fund (NPIF). The £200million scheme will trial models for local hubs in rural areas, starting with primary schools, alongside the 'Rural Gigabit Connectivity Scheme', referenced in 'Schemes and Programmes', for funding full fibre connectivity to nearby premises, providing full fibre connectivity to homes and businesses. Additional announcements are expected in Autumn 2019.

Planned Growth Locations

Table 18 sets out the connections to the broadband market and coverage quality.

Table 18 Development Sites Broadband Coverage

Town	Broadband Market ⁷⁴	Broadband Coverage Quality ⁷⁵
Worcester Parkway	This exchange currently has BT Wholesale as the sole provider of broadband services.	It is likely that significant infrastructure improvement will be required for the planned growth location due to the scale of the proposed site and remote location.
Throckmorton	This exchange currently has BT Wholesale as the sole provider of broadband services.	Whilst there is evidence of some standard speed connections, coverage is patchy. It is likely that significant infrastructure improvement will be required for the planned growth location due to the scale of the proposed site and remote location. There was however a limited, but notable, coverage of FTTP in the area.
Rushwick	4+ principal operators	It is likely that significant infrastructure improvement will be required for the planned growth location due to the scale of the proposed site and remote location

Town	Broadband Market ⁷⁴	Broadband Coverage Quality ⁷⁵
Worcester City	4+ principal operators	Generally, well connected with speeds mostly above the superfast threshold across the city.
Worcester Business Park	4+ principal operators	Generally, relatively poor availability and coverage, which will require upgrade.
Droitwich	4+ principal operators	The area is generally well-connected with speeds exceeding superfast. Some infrastructure may be needed to cover possible development in the south west.
Evesham	4+ principal operators	The overall area is well connected. Proposed development locations are within relatively close proximity to the existing superfast broadband. Regarding proposed employment development locations, superfast connectivity is in relatively close proximity.
Malvern	2 or 3 principal operators	The overall area is well connected. Proposed development locations are within relatively close proximity to the existing superfast broadband. Employment development sites are poorly connected with broadband speeds in the area being below the superfast threshold.
Pershore	2 or 3 principal operators	The area is well connected and enjoys superfast broadband. The overall area is well connected. Proposed development locations are within relatively close proximity to the existing superfast broadband. Regarding proposed employment development locations, superfast connectivity is in relatively close proximity.
Tenbury Wells	This exchange has BT Wholesale as the sole provider of broadband services.	The housing development sites are likely going to require some broadband infrastructure provision due to their large nature.
Upton	This exchange has BT Wholesale as the sole	The overall area is well connected. Proposed development locations are within relatively close proximity to the existing superfast broadband.

⁷³ <https://www.gov.uk/government/news/200-million-to-kickstart-full-fibre-broadband-across-uk>

⁷⁴ https://availability.samknows.com/broadband/exchange_search

⁷⁵ <https://checker.ofcom.org.uk/broadband-coverage>

Town	Broadband Market ⁷⁴	Broadband Coverage Quality ⁷⁵
	provider of broadband services.	

Discussions with WCC highlighted that all new development should:

- Install FTTP as standard, with provision of only copper requirements considered to no longer be considered acceptable. Superfast Worcestershire continues to ‘encourage’ developers to install FTTP connectivity to new builds, whilst the Government is in the process of making gigabit capable connections to new builds mandatory;
- Encourage developers to engage with the market providers as early as possible, to ensure choice of provider (at least 2) and to limit any ‘closed market’ / exclusivity arrangements with a single provider;
- Recognise the need to provide the necessary resilience for employment land development, again, ensuring the market engagement has taken place; and
- Consider the cellular provision, including engaging with the market to ensure provision of appropriate cellular infrastructure.

Discussions with WCC also set out that opportunities to install telecoms infrastructure provision should be considered in civil highways / streetlight or public space or large-scale infrastructure schemes (i.e. schools, railway stations or hospitals). This would ensure that telecoms, cellular or wireless infrastructure is installed proactively during construction, rather than retrospectively introduced. Infrastructure should be installed with sufficient capacity to enable future growth and future-proofing of future infrastructure.

Sector-specific Funding

Broadband: Under the new USO confirmed from March 2020, the cost of providing connections to eligible homes will be paid for up to £3,400. Where

costs exceed this level, properties can either pay the additional costs or seek an alternative solution outside the universal service, such as satellite broadband.

For new developments of more than 30 premises, Openreach will bear all fibre infrastructure costs⁷⁶. For developments between 2-29 units, Openreach has supplied a [table](#) which indicates the extent of expected developer contribution toward the installation of broadband infrastructure with the total cost generally falling as the number of units increases. This is summarised in Table 20 below.

Table 19 Total Infrastructure Costs⁷⁷

Number of Units	Average Total Cost to Developer
2-10	£7413
11-20	£5992
21-29	£2101

In terms of rural provision, the schemes in a previous section also show some ways occupants are able to finance fibre broadband infrastructure on their premises.

Other network operators encourage the engagement with developers and will consider providing infrastructure into new builds at no cost or may also provide equipment such as ‘ducting’ for the developer to install themselves.

Mobile: Improvements to the area’s telephony provision will primarily be undertaken by the respective Telecoms providers. These companies operate as commercial entities, and any improvements they deliver will be funded by the longer-term revenue opportunities that the increased service provision, and thus customer base, unlocks. Mobile providers will also bear the cost of any 5G networks implemented.

⁷⁶ <https://www.openreach.com/fibre-broadband/fibre-for-developers>

⁷⁷ <https://www.openreach.com/fibre-broadband/fibre-for-developers>

Summary and Conclusions

Mobile Provision: Mobile service coverage depends upon each providers infrastructure. Coverage can change drastically between different providers and can also depend on whether someone is indoor or outdoor while using their mobile phone. Mobile 2G, 3G and 4G services can be improved. This includes improving the coverage and optimising the network across the county.

Broadband: Broadband is generally good within the largest settlements mostly achieving superfast speeds and occasionally ultrafast, however, whilst there have been significant improvements, coverage and speed are generally lower in rural areas, with the exception of areas that have benefited from full fibre to the premises deployment of the Superfast Worcestershire programme.

Discussions with both Worcestershire County Council and WLEP considered that, whilst continuing to look at opportunities, there were currently no publicly funded large-scale additional expansion programmes currently secured (beyond the completion of the Superfast Broadband Phase 3 including 'Defra' supported extension and schemes listed in 'Schemes and Programmes'.

Infrastructure Assessment: Education

8 Infrastructure Assessment: Education

Responsibility for delivery⁷⁸

Table 20 Responsibilities for Delivery

Age Group	Responsibility
Early Years (2 – 4-year olds)	WCC under Section 11 of the Childcare Act 2006 and Education Act 2011 places a statutory duty on Worcestershire County Council to make sure that there are enough childcare places to enable parents to take up or remain in work or training; to have free early years education for all eligible young children in their area; and undertaken an assessment of sufficiency of childcare places in the area at least every 3 years, with an annual update. From September 2017, central government have announced that 3 and 4-year-old children from working families who meet central government's eligibility criteria, will be entitled to up to 30 hours of childcare. In addition, some two-year olds are entitled to 15 hours funded, if they meet the eligibility criteria, which is different to that of the working families.
Age 4 – 16 (Primary, Secondary, First, Middle, High)	WCC (under the Education Act 1996) 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 and to make sure these places are of good quality with enough space to promote parental choice and diversity. This includes having regard to the need to secure provision for children with special educational needs and disabilities.
Age 16 - 18	Section 14 of the Education Act 1996 places a duty on Local authorities (LA's) to secure educational provision made for pupils age 16 to 18 and over 19 years. Local Authorities and education authorities must promote the effective participation in education and training of 16- and 17-year olds in their area or make arrangements for those in that age group not participating in education or training. This includes having regard to the need to secure provision for children with special educational needs and disabilities (SEND).
All ages	WCC directly provides services and acts as a commissioner of school places through the provision of academies and free schools. 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.

Overview of progress since the 2016 IDP

Literature, Policy and Strategy Changes

The 2016 IDP set out the context of changes to school governance and commissioning as a result of the 2011 Education Act. The IDP identified that there was a need to extend and alter existing schools to respond to development and population growth, highlighting the challenges of delivering new schools to mitigate housing development due to the lead-in time involved. Across South Worcestershire, a total cost of educational infrastructure required to respond to growth in the SWDP was estimated at over £115m based on WCC benchmarks.

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).

Schools Organisation Plan, Worcestershire County Council (2019-24): The Schools Organisation Plan sets out how the County Council intends to ensure sufficiency of schools' places across all areas of education from 2019 to 2024. The Plan sets out that generally there has been an increase in children entering primary school and secondary school across the County, with reception classes increasing by 5% between 2013 and 2017, and an increase in those entering Year 7 of 12% over the same period.

The number of children in primary school derived from demographic growth is set to maintain at between 44,000 and 46,000 for the foreseeable future. The number of children in secondary schools is due to increase over the next several from 32,000 in 2017 to around 35,000 in 2022.

There is a total of circa 500 funded childcare places for 2-year-olds in South Worcestershire and approximately 4,700 funded places for 3 and 4-year-old children under Universal Hours.

Since 2012, a total of 2,376 further primary and secondary school places have been secured through expansion of a total of 17 schools within South Worcestershire. An additional 50 special school (SEN) places have been provided at Fort Royal Primary and the Vale of Evesham school.

Childcare Sufficiency Assessment, Worcestershire County Council (2018):

This strategy sets out the sufficiency of early years places across Worcestershire and to report on the Local Authority's duty to secure sufficient childcare.

The report highlights the resulting challenge on early years places from the introduction of funded hours for childcare for two, three and four-year olds by Government; known as 'Universal Hours'. Despite this, Worcestershire is one of the top-10 performing authorities in terms of the provision of childcare places.

In terms of existing demands, there are approximately 15,000 families living in Worcestershire with children aged between 2 and 4, around 90% of which use some form of formal childcare. Just 4% of respondents to a survey on childcare in Summer 2018 relied solely on friends and family for their childcare needs and 6% of families aren't using any childcare.

- **Malvern Hills:** There has been high engagement (over three-quarters of those eligible) in terms of those taking up funded places for two-year olds. The demand of places for those eligible under universal hours exceeds supply. However, overall there is lower demand for childcare places within rural areas such as Malvern Hills, due to the make-up of families whereby there is typically a single working parent.
- **Worcester:** Over the last few years, the number of pre-school children has been decreasing and this trend is anticipated to continue. However, within the North East of the City demand for three & four-year-old funded places are anticipated to grow over the next year due to higher birth rates. There is

also a noted additional need for additional provision around the Midland Road and Wylds Lane area in Worcester.

- **Wychavon:** There is generally a lower population of young children in Wychavon as a percentage of residents, however provision is particularly stretched in this area, particularly within rural areas. Many families in these areas struggle to access early years places.

Schemes since 2016⁷⁹

- **Tudor Grange Academy, Worcester** - 1 form-of-entry expansion. Delivered September 2017.
- **North Worcester Primary Academy, Worcester** - new school as part of the Government free school programme to be delivered for Sept 19.
- **Stourport High School, Stourport-on-Severn** - 1 form-of-entry expansion to be delivered for September 2019.
- **Chantry High School, Martley** - 1 form-of-entry expansion. Delivered September 2018.
- **Hartlebury CE Primary School, Hartlebury** - Expanded by 5 places per year to 1 form-of-entry to be delivered for September 2020.
- **Hanbury CE Primary School, Hanbury** - expanded by 3 places per year to 1 form-of-entry to be delivered for September 2019
- **Kempsey Primary School, Kempsey** - expanded by 5 places per year group to be delivered for September 2019.
- **Kempsey Primary School, Kempsey** - expanded by 15 places per year to 2 form-of-entry to be delivered for September 2020.
- **Somers Park, Malvern** - expansion by 1 form-of-entry onto satellite site Malvern Vale. Delivered September 2018.

⁷⁸ <https://www.gov.uk/help-with-childcare-costs/free-childcare-2-year-olds>
<https://www.gov.uk/30-hours-free-childcare?step-by-step-nav=f517cd57-3c18-4bb9-aa8b-1b907e279b9f>
http://www.worcestershire.gov.uk/info/20585/school_organisation_and_provision_planning

Department for Education (September 2016) Participation of young people in education, employment or training

⁷⁹ Identified through consultation with WCC, May and August 2019.

- **Nunnery Wood High School, Worcester:** expansion by 1 form-of-entry. Delivered September 2018.
- **Christopher Whitehead Language College, Worcester:** expansion by 1 form-of-entry. Delivered September 2017.
- **Callow End CE Primary, Callow End:** expansion by 3 places per year group to 0.5 form-of-entry. Delivered September 2016.
- **Leigh and Bransford Primary, Leigh Sinton:** expansion by 15 places per year group to 1 form-of-entry. Delivered September 2016.
- **Northwick Manor Primary, Worcester:** temporary classroom for additional 30 places to support single cohort year. Delivered September 2016.
- **Vale of Evesham School, Evesham:** delivered 9 additional SEND places. Delivered for September 2016.
- **Fort Royal Primary School, Worcester:** delivered 20 additional SEND places. Delivered for September 2016.
- **Red Hill CE Primary, Worcester:** expansion to by 1 form-of-entry. Delivered September 2017.
- **Rushwick CE Primary, Rushwick:** expansion by 10 places per year group to 1 form-of-entry. Delivered September 2017.
- **Wychbold First and Nursery School, Droitwich:** expansion of 10 places per year group to 1 form-of-entry. Delivered September 2016.
- **Evesham Nursery, Evesham:** expansion of 26 early years places. Delivered September 2017.
- **Claines CE Primary, Worcester:** replacement of temporary classrooms with permanent accommodation. Delivered September 2018.

Assessment of Current Infrastructure Provision

There are several different types of school across the South Worcestershire Council area which fall within the state-funded sector, and which are eligible to receive funding from planning obligations if they are deemed to be related to a particular type of development.

Table 21 SWC Current Education Infrastructure⁸⁰

Infrastructure	Provider
74 Local Authority-maintained schools	WCC
60 Academies	DfE
1 Free Schools	DfE
276 funded childcare providers (as at June 2018)	WCC/ Private business

Early Years Provision

Early years provision is provided through a mix of both private and maintained provision. There are several types of provider which are eligible to receive funding from planning obligations if these are deemed to be related to a development. This includes: day nurseries; child-minders and childcare on non-domestic premises; school-based provision; any other type of provision that offer funded early education places⁸¹.

Primary and secondary provision

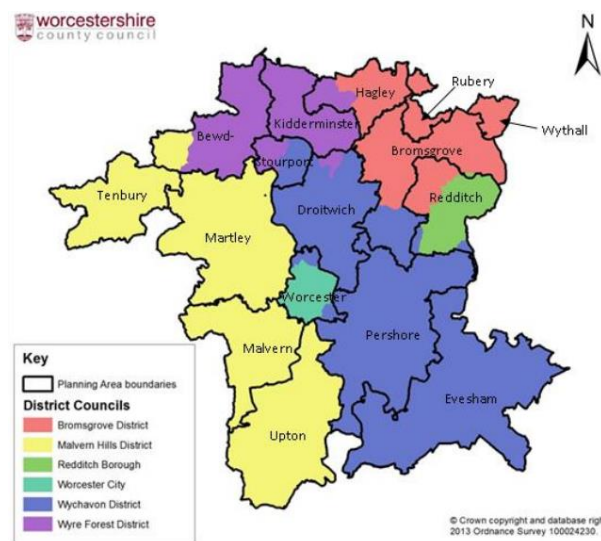
The challenge associated with primary and secondary school provision within South Worcestershire is that there are a range of education systems in operation.

⁸⁰ Worcestershire County Council's Schools Organisation Plan (2019-2024). Correct as at July 2019.

⁸¹ WCC Education Planning Obligations Policy August 2019

Table 22 School Operation Systems⁸² based on year groups (R = reception)

Two-tier model		Three-tier model A	Three-tier model B	Three-tier model C
Primary Years (R-6)		First Years (R – 4)	First Years (R-4)	First Years (R-5)
Secondary Years (7-13)		Middle Years (5-8)	Middle Years (5-7)	Middle Years (6-8)
		High Years (9-13)	High Years (8-13)	High Years (9-13)
Tenbury	Upton	None in SWC	Droitwich	Evesham
Martley	Worcester		Pershore	
Malvern				

Figure 8 School Education Planning Areas


Source: WCC Education Planning Obligations Policy August 2019

It is currently anticipated that planned housing developments as part of the previous iteration of the SWDP could result in the need for two new first/primary schools across South Worcestershire⁸³.

Two cross boundary urban extensions named the South Worcester Urban Expansion and West Worcester Urban Expansion will require the provision of new primary free schools.

Planned Provision and Scheme Identification based on revised Housing Needs

The Consultation on Revised WCC Education Planning Obligations Policy adopted August 2019⁸⁴ has demonstrated that due to the nature of the population within new settlements and urban extensions (typically younger people and new families) that the numbers of children per capita are higher than elsewhere in the County. The revised Planning Obligations Policy is applicable to all applications over 10 units submitted from 1st August 2019 and therefore it is prudent to reflect this within updated child yields set and responding requirements. Exemptions also include properties deemed to be social rent or affordable rent, developments that are 100% for commercial use, one-bedroom properties or student accommodation.

Worcestershire County Council (WCC) is the education authority covering the South Worcestershire district councils and therefore welcomes early engagement with prospective developers. To determine whether obligations are indeed related to the development and necessary, WCC consider Education Planning Areas and existing school capacity.

For simplicity, calculating demand has been delineated to each of the main age groups.

⁸² WCC Education Planning Obligations Policy August 2019

⁸³ Worcestershire County Council's Schools Organisation Plan (2019-2024)

⁸⁴ Worcestershire Education Planning Obligations August 2019

http://www.worcestershire.gov.uk/info/20015/planning_policy_and_strategy/142/school_planning_obligations

Demand for Early Years Places (2-4-year olds)

The Consultation sets out a pupil yield calculation and space requirements for early years childcare places:

- **Pupil Yield for Early Years:** Using an assessment of average eligibility rates for two-year-old funding and 30 hours funding for three and four-year olds, WCC identify that there is an average of **0.11 full-time equivalent early years place requirements per dwelling from new dwellings**. This is based on the evidenced 'Pupil Product Ratio' per year group and eligibility for two-year-old funding and 30-hour funding for three and four-year olds across Worcestershire.
- **Form of Provision:** When the impact of development is judged to be of a level which cannot be supported within existing provision, financial contributions may be sought towards the creation or expansion / refurbishment of early years provision. WCC will consider payment in kind by direct provision of a facility, however the specification will be prescribed by WCC. Where a new school is required from a development, early year's provision will always be built alongside it to a size suitable to the requirements of the site. Consultation with the County Council has revealed there are few childcare options in rural areas.
- **Extensions:** Where extension to existing providers are proposed, Worcestershire County Council will only seek to expand a provider which is currently rated as 'Good' or 'Outstanding' by Ofsted. There is no nationwide funding formula for Early Years provision, there is guidance based on the amount of floorspace that an Early Years child will need – based on the age of the child. These include:

Table 23 Floorspace requirements for the Early Year's providers

Age	Indoor Space Requirements
Under two years old	3.5m ² per child
Two-year olds	2.5m ² per child
Children aged three to five years	2.3m ² per child

- **Build Costs:** This is based on the actual costs of providing one additional full-time place at an existing provider, based on the national average costs published annually in the DfE school place scorecards.

Table 24 Build Costs based on April 2019

Build Costs	Type of Provision
£17,649	Primary and Early Years
£23,528	Secondary and Sixth Form
Four times the cost of a place appropriate for the phase of education	SEND Places

Where relevant, other factors such as the location of the proposed development and other extant planning permissions in the area will be factored into determining the likely impact of new development and the ability of existing provision to manage new demand.

Table 25 Calculating Early Years contributions

For contributions towards existing providers April 2019:		
Number of chargeable dwellings (homes)	Multiplied by total number of FTE early years places (× 0.11)	Multiplied by the cost of early years places (× £17,649)
XX homes × 0.11 × £17,649 = Early Years Contribution		
For space requirements:		
Early Years FTE places	Multiplied by the total floorspace requirement	
(No of under 2-year olds × 3.5m ²) + (No of 2-year olds × 2.5m ²) + (No of 3-5-year olds × 2.3m ²)		

Demand for Primary and Secondary School Places

The challenge for providing primary and secondary school places across the South Worcestershire Council area is in relation to the variation in school operating models across the South Worcestershire Area.

Given that the most recent growth has been largely focused in and around urban areas such as Worcester, there has been some capacity to absorb increased numbers within existing schools. A more dispersed growth strategy, such as the creation of new settlements require the construction of new schools and nurseries.

Pupil Yield: The policy identifies that assessments are considered by WCC on an individual basis, with relevant evidence provided to the LPA and the developer. Additional pupil yields are calculated from the pupil product ratio:

- **0.05 pupils** per year group per dwelling for **primary provision**; and,
- **0.04 pupils** per year group per dwelling for **secondary provision**.

Related Schools: When a development site comes forward, WCC will identify related schools based on the following:

- Schools operating a **catchment area** covering the development area;
- Schools located within a **2-mile safe walking** route for 8 years or younger, or **3-miles for 9 years** or older;
- Schools that can demonstrate a likely demand from families moving onto the development; or,
- Where a development is of a sufficient scale a new school is considered.

Capacity is impacted by parental choice under the School Admissions Code⁸⁵, which enables parents to apply to any school of their preference. Whilst there is no automatic entitlement to a place at their first-choice school, WCC does aim to maintain a 5% operational surplus within any education planning area in order to support parental preference. This ability for preference also allows for cross-boundary movements.

⁸⁵ <https://www.gov.uk/government/publications/school-admissions-code--2>

Form of Provision: The assessment will consider the location of development including the proximity to existing educational infrastructure, known trends in parental preference and the full extent of the development site area.

- **Extension:** WCC will only seek to expand a school which is currently rated as ‘good’ or ‘outstanding’ by Ofsted. If the schools initially identified as related to the development has no scope to expand, consideration will be given to investing in an alternative related school. Worcestershire County Council now acts as a commissioner of school places, and therefore cannot compel schools to expand.
- **Building Cost Multiplier:** As at table 4, this is £17,649 per primary school place and £23,528 per secondary and sixth form place as at April 1st 2019. This will be revised annually and will reflect the actual cost of providing a school place when the payment is made.

Table 26 Calculating Primary and Secondary Provision at existing providers

Primary School contributions towards existing providers April 2019:			
Number of chargeable dwellings (homes)	Multiplied by total number of primary places per year group (× 0.05)	Multiplied by the number of year groups within each phase. (see Table 2)	Multiplied by the cost of provision (× £17,649)
XX homes × 0.05 × XX number of year groups × £17,649 = Primary Contribution			
Secondary and Sixth Form school contributions towards existing providers April 2019:			
Number of chargeable dwellings (homes)	Multiplied by total number secondary places per year group (× 0.04)	Multiplied by the number of year groups within each phase. (see Table 2)	Multiplied by the cost of provision (× £23,528)
XX homes × 0.04 × XX number of year groups × £23,528 = Secondary Contribution			

- **Provision of new:** It should be assumed that both land and funding for construction will be provided for new schools, and that WCC will require the developer to fund all the build and land costs.

- All new schools will open as a free school, and any new schools with primary provision will require early years provision on site.
- **Primary:** Where a development will contribute 300 or more new dwellings, or in areas where no potential school expansions can be identified, a new primary school may be required.
- **Secondary:** A new secondary or special school is only likely to be required on very large sites. For 2000+ dwellings, WCC will assess contributions on a case by case basis.

Demand for SEND Provision

Pupil Yield: The policy calculates the SEND Pupil requirement based on an average percentage of pupils in Worcestershire requiring SEND specialist education provision. Using the current average, there are approximately 3% of pupils over the age of 5 years. This percentage is significantly lower for children under the age of 5, and therefore SEND provision is not sought for early education.

Building Cost Multiplier: The cost of providing SEND places is four times the cost of a place appropriate for that phase of education. This is as per Government guidance.

Where the impact of development on education infrastructure is such that it can be shown that there will be a requirement for additional provision for children with special needs and disabilities, contribution through S106 or CIL will be assessed and calculated on a case-by-case basis.

Sixth Form

The average stay on rate between (2014-2017) for children moving from year 11 to year 12 in a publicly funded school was 51%. Therefore, schools with a sixth form is treated as a having one additional year group.

Building Cost Multiplier: As at table 4, this is £23,528 per secondary and sixth form places.

Summary of Requirements

This chapter considers the potential sites put forward for allocation under the South Worcestershire Infrastructure Study 2019. In consideration, WCC has set out its response regarding the impact of the proposals on education infrastructure. This includes a range of possible measures that may be considered to best accommodate the proposals.

The education infrastructure requirements outlined below have been developed based on the pre-submission sites and form part of the infrastructure evidence base. As such the requirements have been developed by WCC officers to support development of the South Worcestershire Infrastructure study and will be subject to further work as the site planning progresses.

- **Strategic Sites:** Growth proposed on strategic allocations at Worcester Parkway and Throckmorton are likely to require new schools, with Worcester Parkway likely to create a requirement for at least one new secondary school with sixth form provision. WCC considered that the aim for these sites would be for them to be self-sustaining.
- **Worcester:** WCC considered that there were mixed levels of provision across the City. Many schools within the city are now at capacity and at least one new school will likely be required to address demand.
- **Malvern:** There are varying levels of provision in and around Malvern Town. There is limited capacity in primary schools to the South East of the Town and a new primary school will likely be required to meet on-site demand. Whilst there is some capacity at Secondary level this will be absorbed by existing new housing and therefore expansions at the schools will be required.
- **Droitwich:** WCC set out that there are varying levels of provision in and around Droitwich. Whilst there is some capacity at Secondary level this will be absorbed by existing new housing. The levels of development set out in the Local Plan would likely require additional provision at First, Middle, and High School level.

- **Evesham:** WCC identified that there is known under-provision across the area and additional provision at all stages will be required.
- **Pershore:** WCC has stated that there are no additional places at First school level in Pershore and space in middle and high school are limited. Future piecemeal development would be expected to contribute to expansion of existing schools or the creation of new schools.
- **Tenbury Wells:** WCC identified that contributions would be required to increase capacity at Primary schools, but that there are few opportunities to expand due to on-site constraints. There is sufficient Secondary provision in the area to support growth as currently suggested.
- **Upton:** WCC state that Upton-upon Severn CE Primary School and the nearby Hanley Castle High School have limited capacity and restricted sites making expansion difficult. Given the levels of development proposed, contributions would be expected to expand existing schools. If this is not possible, then a new school will be considered necessary to support new housing in this area.
- **Mitton:** Awaiting final consultation response from WCC Education.
- **Category 1, 2 and 3 villages:** Small village schools are often severely restricted in their ability to expand, and dependent on the location of new housing, it may not be possible to meet the demands of new housing within existing schools. Some small rural schools will be revitalised by new housing which tends to attract younger families. Therefore, new housing within 1,2 and 3 category villages will be assessed on a case by case basis.

Using the proposed levels of growth from September 2019, Table 27 below sets out the likely contributions for SEND, early-years, primary and secondary provision. The calculations of contributions are based on an arbitrary assessment based on a cost per pupil places. Therefore, these figures are indicative only and where a new school is required, contribution will be based on an up to date feasibility of providing the facility as per the adopted policy.

Where new schools are required, land appropriate for the size of provision will also be required.

Table 27 Potential Education Contributions based on September 2019 levels of growth.

	School Operating Area (1)	Number of Homes (2)	SEND Contributions (3)	Early Years Contribution	Primary Contribution (4)	Secondary and Sixth Form Contribution (5)
Parkway	Two-tier	5,000	£7,129,620	£9,706,950.00	£30,885,750.00	£28,233,600
Throckmorton	Three Tier B	2,000	£2,894,196	£3,882,780.00	£12,354,300.00	£11,293,440
Rushwick	Two-tier	1,000	£1,529,452	£1,941,390.00	£6,177,150.00	£5,646,720
Worcester City	Two-tier	1,300	£1,929,464	£2,523,807.00	£8,030,295.00	£7,340,736
Droitwich	Three Tier B	600	£894,136	£1,164,834.00	£3,706,290.00	£3,388,032
Evesham	Three Tier C	200	£329,416	£388,278.00	£1,235,430.00	£1,129,344
Malvern	Two-tier	700	£1,058,844	£1,358,973.00	£4,324,005.00	£3,952,704
Pershore	Three Tier B	600	£894,136	£1,164,834.00	£3,706,290.00	£3,388,032
Tenbury Wells	Two-tier	120	£164,708	£232,966.80	£741,258.00	£677,606
Upton	Two-tier	120	£164,708	£232,966.80	£741,258.00	£677,606
Mitton	Two-tier	500	£709,432	£970,695.00	£3,088,575.00	£2,823,360
Rural Areas (3)	Two-tier	1,860	£2,639,088	£3,610,985.40	£11,489,499.00	£10,502,899

(1) Where unknown assumed Two-tier

(2) Assumed all chargeable see IDP chapter and Education Planning Obligations Policy for confirmation of exceptions.

(3) Assumed at 3% of all places

(4) Assumed 7-year groups within each school

(5) Assumed 7-year groups within each school

Sector-specific Funding

Discussions with WCC highlighted that delivery of new school places in South Worcestershire are likely to be reliant on s.106 contributions and CIL receipts. As funding becomes available from the CIL, WCC will bid for projects to support education infrastructure as required.

The approach to funding education places and infrastructure across England is multi-faceted, with more than half a dozen funding sources included within the County Council's education capital programme. These include:

- Basic need (capital grants to increase pupil places);
- Capital maintenance grant;
- Special provision capital fund;
- Locally Controlled Voluntary Aided Programme (LCVAP) - this will cease in 2020;
- Section 106 / Community Infrastructure Levy (Developer Contributions);
- Devolved Formula Capital (DFC) – School specific allocations; and,
- County Council's capital programme.

In addition, there are occasionally opportunities to apply for specific grant funding. Capital funding was allocated by the DfE in 2017/18 to support the increase in early years places available for 30 hours places (universal hours). Worcestershire County Council was able to bid for up to six providers and was successful with its six bids resulting in additional capital funding of £860,949.

Expansion: Significant expansions will be subject to appropriate public consultation and approval by the relevant decision-making body. Expansion will be subject to agreement from the school's governing body and the Education and Skills Funding Agency, in the case of academies and free schools.

New Schools: If a new school is required solely as a result of new housing, WCC require the developer to fund all of the build costs and provide serviced sufficient land on the development site appropriate for the construction of the school. The build costs will be determined by a detailed feasibility of the proposed school site where possible or a generic site where not possible.

Worcestershire County Council will consider payment in kind by the direct provision of buildings by the developer. In this instance the specification and design of any provision must be agreed with Worcestershire County Council.

Summary and Conclusion

Capacity at existing schools and academies varies significantly throughout South Worcestershire, and whilst a number of new / expanded schools have been delivered, schools within most of the main towns within the area are nearing capacity.

In terms of the overall strategy for new growth, consultation with Worcestershire County Council has indicated that there is an expectation that the proposed strategic allocations should be 'self-contained', with future education provision secured onsite either via developer delivery or funded through the methods within the funding section of this chapter. Expansions to existing schools are expected where there are smaller or more dispersed developments.

Infrastructure Assessment: Health and Social Care

9 Infrastructure Assessment: Health and Social Care

Responsibility for delivery

Delivery of healthcare services and infrastructure is divided between four organisations within South Worcestershire, and the NHS.

Table 28 Responsibilities for Delivery

Service Provider	Responsibility
NHS England	Responsibility for the delivery of primary healthcare services falls within NHS England's remit.
South Worcestershire Clinical Commissioning Group (CCG)	The CCG is responsible for commissioning community, secondary and mental health services. This includes commissioning of GP services across the 31-member practices in South Worcestershire. Whilst the CCG represents GP surgeries, ultimately, the delivery of new facilities or expansion of existing surgeries is a commercial decision for individual businesses.
Worcestershire Acute Hospitals NHS Trust (AHT)	The AHT is responsible for the provision of secondary care services within hospitals across Worcestershire. Within South Worcestershire, these services are focussed at the Worcestershire Royal Hospital, Worcester. Its other sites, in Redditch and Kidderminster are outside the SWDP area, however their catchment area does extend into the districts.
Worcestershire Health and Care NHS Trust (HCT)	The HCT is responsible for the provision of community and mental health services. The Trust runs Community Hospital services at Evesham, Pershore, Malvern and Tenbury Wells.
Worcestershire County Council (WCC)	WCC is responsible for the provision of adult and child social care across the three South Worcestershire Districts.

Overview of progress since the 2016 IDP

Literature, Policy and Strategy Changes

The last iteration of the IDP established the changing context for delivering healthcare across the SWC area. This included the need to make efficiency savings as result of budget pressures, whilst accommodating increasing demand; it is understood that this has continued across the delivery of all health and social care services since the 2016 IDP.

Specifically, the Clinical Commissioning Group has undertaken a review of acute hospital services⁸⁶ to deliver safe services. This has involved deploying the Trust's professional workforce more sustainably which is now being implemented. A revised Clinical Service Strategy which builds on the review's changes is due to be published in October 2019.

Both the Clinical Commissioning Group and the Acute Hospitals Trust are in the process of preparing Estate Management Strategies to help to manage physical assets and services across South Worcestershire. A draft version of the Primary Care Estate Strategy has been used to inform this IDP.

Changes since 2016 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 that strategic policies should set out an overall strategy for the pattern, scale and quality of development, and make sufficient provision for community facilities, inclusive of health infrastructure. Indeed, the NPPF requires planning policies and decisions (Paragraph 91) to enable healthy lifestyles which address local health and well-being needs.

Worcestershire Joint Strategic Needs Assessment 2018 Summary Report: The JSNA provides a summary of the latest public health data and information

⁸⁶ Future of Acute Hospital Services in Worcestershire (Worcestershire Acute Hospitals Trust, 2017)

for Worcestershire including an update on the three Health and Well-being Board priorities: activity, alcohol harm and mental health and well-being. The County has similar levels of physical inactivity to the national average, has lower rates of hospital admissions for alcohol-related conditions and has higher prevalence of depression and anxiety.

Emerging issues in the 2018 review include: high rates of antibiotic prescribing, air pollution, school readiness and educational development, poor oral health and rising needs for social care.

The Assessment highlights that Malvern Hills and Wychavon have a high proportion of people aged 65 and over and the population aged 65+ is projected to increase steeply to 2030. This is likely to create further demand for health and social care services.

SWDP Planning for Health SPD (2017): This document provides additional guidance to officers, applicants and relevant organisations on delivering healthier developments. This requires larger developments (over 25 dwellings or 5ha employment) to be supported by a HIA which helps inform the assessment of infrastructure requirements by the CCG.

SWDP Developer Contributions SPD (2018): For healthcare, the SPD sets out a calculator for the levels of developer contributions required based on the scale of development. This sets out the following developer contributions:

Table 29 Developer Contributions for Healthcare

Scale of Development	Contribution sought
Less than 50 dwellings	Contributions only sought where there is a significant oversubscription of GP Lists (i.e. 110% of the recommended number of patients).
50 – 100 dwellings	CCG to consider current surplus places and to consider how development would impact this.
100 dwellings	Developments of over 100 dwellings will normally be expected to contribute to the provision of additional primary healthcare infrastructure unless there is more than enough spare capacity at the nearest GP surgery to accommodate the additional number of residents.

Typically, contributions would not be sought for less than 10 dwellings, unless the proposals are for extra care or high dependency housing.

Changes since 2016 IDP: Primary Care

Herefordshire and Worcestershire STP Primary Care Estate Strategy

(2019-2024): The Strategy presents the results of surveys of CCG premises and their function and plans for future growth and improvement using capacity audits and identifying existing ‘hot spots’ of growth.

The emerging vision for the STP/ CCG is that “local people will live well in a supportive community, with joined up care underpinned by specialist expertise and delivered in the best place by the most appropriate people.”

The Estate Strategy outlines that there are 63 GP practices and a total 423 GPs within Worcestershire. A full list of GP practices is included within the current infrastructure provision part of this chapter.

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 is encouraging Clinical Commissioning Groups to establish primary care networks. 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.

It is understood that these networks will come into force on 1 June 2019 for South Worcestershire, however some member practices are already putting some of the principles into action through co-location and by sharing staff.

South Worcestershire Clinical Commissioning Group Annual Report

(2017/18): The Annual Report sets out a key strategy of working with partners across Herefordshire and elsewhere in Worcestershire to tackle workforce and workload issues and to develop and deliver services that support patients’ recovery at home to reduce hospital admissions.

In terms of finance and governance, the Annual Report highlights how the CCG has worked with the other Worcestershire CCGs to manage efficiency programmes to meet financial targets and that the three Worcestershire CCGs

(South Worcestershire, Redditch and Bromsgrove, and Wyre Forest) now share the Governing Body Meetings as committees in common. In the past year, the CCG highlights the following key challenges:

- Pressure on the healthcare system as a result of winter-related illnesses and accidents;
- Failure to meet constitutional standards and targets; and,
- Delivery of significant financial savings.

Changes since 2016 IDP: Secondary and Tertiary Care and Social Care

Worcestershire Acute Hospitals NHS Trust Future of Acute Hospital Services in Worcestershire (2017): This Acute Service Review identified the following schemes, including 81 additional beds, a High Dependency Unit and the creation of 141 new car parking spaces at the Worcestershire Royal Hospital.

An outline business case for £29.6m capital to support these enabling works was approved in December 2017, followed by the preparation of a Full Business Case. In early 2018, the Trust was able to access a £3 million capital loan to allow work to begin on the construction a link bridge between the main Worcester hospital building and the Aconbury buildings in advance of the approval of the FBC.

Worcestershire Acute Hospitals NHS Trust Annual Report (2017/18): This Annual Report sets out that the Acute Hospitals NHS Trust (AHT) has been in special measures since 2015 as a result of concerns over its ability to meet targets set by the Care Quality Commission. Almost 3,000 patients visit the trust per day across its three sites in Worcester, Kidderminster and Redditch.

Echoing the findings of the 2016 SWIDP, the Annual Report sets out that there is a £40m funding deficit for 2018/19 and that the AHT is targeting £23.9m of Cost Improvement Programme savings for 2018/19.

Worcestershire Health and Care NHS Trust Estate Strategy 2017/18 to 2021/22: The Health and Care NHS Trust (HCT) operates from over 80 sites

and 127 buildings across Worcestershire. It highlights the following priorities to ensure the delivery of services at these locations:

- Efficiency and effectiveness;
- Promoting prevention;
- Improving out-of-hospital care; and,
- Developing sustainable services.

The Estate Strategy sets out the following approach to managing assets across the three South Worcestershire Districts.

In **Worcester**, the Strategy highlights that alternative solutions will need to be found for central clinic services at Moor Street, Crowngate and the Lowesmoor building. Solutions are being pursued through the ‘One Public Estate’ programme. It is understood that these services are to close in the Autumn 2019 and relocated to a fit-for-purpose facility at Worcester Royal Hospital. The strategy seeks to optimise the use of newer facilities including the Elgar Unit and Aconbury North. Consultation with the HCT has highlighted that both Maddox House and Woodside have been relocated. In **Malvern**, the strategy sets out the continued use and optimisation of facilities at the Community Hospital. In **Wychavon**, the HCT is seeking opportunities to develop and enhance Evesham Community Hospital.

Primary Care Schemes since 2016

Since the 2016 IDP, the Primary Care Infrastructure Fund (PCIF) and then subsequently the Estates & Technology Transformation Fund (ETTF) has delivered the following improvements and expansions:

- Abbottswood Medical Centre, Pershore
- Riverside Surgery, Evesham
- Whiteacres Medical Centre, Malvern
- Elgar House Surgery, Redditch
- Bredon Hill Surgery
- DeMontfort Medical Centre, Evesham

Secondary Care Schemes since 2016⁸⁷⁸⁸

- **Link Bridge** (Worcester Hospital, Worcester): New bridge connecting the main hospital building to the Aconbury Building on site was completed in January 2019.
- **Avon Ward**, Aconbury Building (Worcester Hospital, Worcester): New 84-bed ward delivered January 2019.
- **A&E Expansion** (Worcester Hospital, Worcester): Modular unit extension to existing A&E building, a new discharge lounge and an additional 150 car parking spaces. Ongoing, completion expected within 2019.
- **Elgar Unit**, (Worcester): A new adult mental health services ward. Completed.
- **Kings Court**, (Worcester Central): Relocation with the former Hereford & Worcester Fire and Rescue Service identified through the ‘One Public Estate’ scheme.
- **Waterside Day Hospital**, (Evesham): Refurbishment of existing mental health centre. Completed.
- **Covercroft Clinic**, (Droitwich): Refurbishment of existing paediatric service. Completed.
- **Warndon Clinic**, (Worcester): Refurbishment of the older adult community mental health clinic. Completed.
- **Cavendish Park Care Home**, (Evesham): New 67-room care home for residents over 65 years of age. Completed.

each facility, current list sizes and commentary provided by the CCG on capacity.

GPs are typically privately provided. The NHS sets a national standard of 1 GP: 1,750 patients. There is a recognition that this ‘list size’ style can often misrepresent the availability of skills or FTE GPs and as such, the CCG has provided existing and future list sizes and the gross internal area (GIA, m2) at present and the required GIA to meet its needs. This information is provided in full overleaf.

Assessment of Current Infrastructure Provision

Primary Care: GPs and Dentists

The following tables set out the current provision of GPs and dental practices within the South Worcestershire Area, including the numbers of staff within

⁸⁷ Worcestershire Health and Care NHS Trust Estate Strategy 2017/18 to 2021/22:

⁸⁸ Update on scheme provided by South Worcestershire CCG

Table 30 GP Provision within SWC⁸⁹

Premises Name	2019 List Size	Estimated 2034 List Size	GIA m ²	Estimated Required GIAm ²	Capacity
Ombersley Medical Centre, Ombersley: Covering a largely rural area. Surveyed as being of good quality in the Primary Care Estates Strategy (PCES).	4476	4916	698	794	114%
Salters Medical Practice, Droitwich Spa: A new practice. Surveyed as being of good quality in the Primary Care Estates Strategy (PCES).	9067	9958	1111	1236	111%
Spa Medical Practice, Droitwich Spa: Newer practice. Surveyed as being of good quality in the Primary Care Estates Strategy (PCES).	9557	10496	990	1236	125%
Corbett Medical Practice, Droitwich Spa: Surveyed as being operational but requiring major repair or replacement in the Primary Care Estates Strategy (PCES).	12717	13967	1322	1324	100%
Riverside Surgery, Evesham: Limited capacity. overall physical condition, building fabric and M&E systems all requiring investment.	15243	16741	827	1324	160%
Bredon Hill Surgery, Bredon Noted as having capacity, however the surgery is likely to grow due to pressures from growth in adjoining areas such as Ashchurch, within Gloucestershire.	5549	6094	302	353	117%

Premises Name	2019 List Size	Estimated 2034 List Size	GIA m ²	Estimated Required GIAm ²	Capacity
Barn Close Surgery, Broadway Identified as having limited capacity and is on a constrained site with no opportunities for expansion or for increasing the number of doctors. An alternative site with greater capacity is being constructed.	7704	8461	353	441	125%
Merstow Green Medical Practice, Evesham. Considered to have some, limited capacity by the CCG.	10281	11291	1249	1059	85%
Abbey Medical Practice, Evesham: Leased site which is likely to be overcapacity at the end of the plan period.	9485	10417	436	794	182%
Demontfort Medical Centre, Evesham. Assessed as having capacity by the CCG	7528	8268	569	530	93%
Grey Gable Surgery, Inkberrow: No capacity issues identified.	4960	5447	514	353	69%
Great Witley Surgery, Great Witley: Assessed as lacking capacity to meet current growth.	6800	7291	381	706	186%
Martley Surgery, branch of the Great Witley surgery in Martley with 1 GP.		7291	42		0%
Upton Surgery, Upton upon Severn: Assessed as having capacity.	11232	12044		1412	Unknown
Whiteacres Medical Centre, Malvern: The CCG has highlighted that this surgery has capacity to respond to growth.	9687	10387	1016	883	87%

⁸⁹ Capacities and GP numbers referenced from Care Quality Commission Reports Available: <https://www.cqc.org.uk/search/services/doctors-gps?location=Worcester> and cross-referenced with Practice Websites

⁶Commentary provided by South Worcestershire CCG during consultation in May 2019 and from the Primary Care Estates Strategy Appendix 1 (South Worcestershire CCG, 2019-2024).

Premises Name	2019 List Size	Estimated 2034 List Size	GIA m ²	Estimated Required GIAm ²	Capacity
Tenbury Surgery and Clee Hill Branch in Tenbury Wells. Considered to be significantly overcapacity.	9684	10384	360	883	245%
Knightwick Surgery, Tenbury: No current capacity issues.	9435	10117	281	353	126%
Abbottswood Medical Centre, Pershore: This site has recently expanded, however there were unlikely to be further opportunities for expansion.	10760	11817	820	1059	129%
Pershore Medical Practice, Pershore: Covers Pershore and the surrounding rural areas.	10379	11399	1565	1766	113%
Malvern Health Centre, Malvern: Three surgeries, two of which have merged, operating from the same site. These surgeries are working together to address the demands associated with growth in accordance with the principles established by the NHS in relation to Primary Care Networks.	14597	15652	713	1324	186%
St Saviours Surgery, Malvern: Small surgery based in Malvern link. Isolated location which may be	4576	4907	342	441	129%
New Court Surgery, Malvern: Three surgeries, two of which have merged, operating from the same site. These surgeries are working together to address the demands associated with growth in accordance with the principles established by the NHS in relation to Primary Care Networks.	9826	10536		1059	Unknown

Premises Name	2019 List Size	Estimated 2034 List Size	GIA m ²	Estimated Required GIAm ²	Capacity
Severn Valley Medical Practice, Worcester: It has been highlighted by the CCG that this surgery is nearing full capacity. The site is geographically constrained and as such there are no options for expansion.	20193	21362	931	1059	114%
Lyppard Grange Medical Centre, Worcester: Surgery in Warndon. Branch practice of Severn Valley Medical Practice.		21362	627		0%
Spring Gardens Group Medical Practice, Worcester: Practice in the Centre of Worcester.	16542	17500	1186	1501	126%
Elbury Moor Medical Centre, Worcester: Surgery in the north east of Worcester.	12084	12784	1108	883	80%
Haresfield House Surgery, Worcester: Surgery in the east of Worcester. CCG identified that there would be a degree of expansion across Worcester, however practice appears to be over capacity based on list size.	16419	17370	1365	1236	91%
Kempsey Surgery, Kempsey: Branch surgery of the Haresfield House Surgery.		17370	81		0%
St Martin's Gate Surgery, Worcester: Practice in the Centre of Worcester. Plan to maximise the use of this site as a major healthcare hub for Worcester.	12381	13098		1148	Unknown
St Peter's Surgery, Worcester: Branch surgery of the St Martin's Gate Surgery.		13098			Unknown

Premises Name	2019 List Size	Estimated 2034 List Size	GIA m ²	Estimated Required GIAm ²	Capacity
Thorneloe Lodge Surgery, Worcester: Surgery in northern Worcester. CCG identified that there would be a degree of expansion across Worcester, however practice appears to be at capacity based on list size. Planned scheme for replacement of this surgery.	11163	11810	459	794	173%
Barbourne Health Centre, Worcester: CCG identified that there would be a degree of expansion across Worcester, however practice appears to be over capacity based on list size.	11605	12277	565	1148	203%
St Johns House Surgery, Worcester: The practice relocated to the current site in 2014 and is considered to have capacity at present, although may be subject to pressures associated with the growth at planned urban extensions to the south and west of Worcester.	12379	13096	1205	971	81%
Albany House Surgery, Worcester: Surgery within a Grade II Listed Building. Likely to be difficult to expand. Applications to extend parking have been refused.	7023	7430	471	706	150%
Farrier House Surgery, Worcester: The site was formerly occupied by the Worcester Walk-in Centre.	5717	6048	367	265	72%

Dentists within the SWC area are all privately provided. Table 31 below sets out the private providers within the District, and the numbers of staff within each practice. Again, referencing the Baker Associates report, the 2016 IDP indicates that one extra dentist is needed for an additional 2,000 people.

Table 31 Number of Dental Practices and Staff within the SWC area

	Dentists (no of Staff)	Other Staff inc. Hygienists, orthodontists and dental nurses
Shrubbery Dental Practice, Worcester	3	9
Lowesmoor Dental Access Centre, Worcester	Details withheld by practice	
Trinity Gate Dental Practice, Worcester	Details withheld by practice	
Bupa Dental Care, Worcester	Details withheld by practice	
Gentle Dental Care LTD Worcester	Details withheld by practice	
Bullring Dental Practice, Worcester	4	3
St Johns Dental Practice, Worcester	3	3
The Beeches Dental Centre, Worcester	4	6
Redcliffe Orthodontics, Worcester		2
Bhandal Dental Practice, Worcester	3	
St Peters Dental Surgery, Worcester	3	1
Abbotsbury Court Dental Practice, Worcester	3	
mydentist, Ankerage Green, Worcester	6	
Spa Dental Practice, Droitwich Spa	2	2
Gentle Dental Practice, Droitwich Spa	Details withheld by practice	
Gentle Dental Practice, Evesham	Details withheld by practice	
Richmond Dental Practice	4	2
Upton Dental Surgery, Upton-upon-Severn	5	1
Mercian House Dental Practice	1	4
Salmon and Light Dental Surgery	3	1
R A Arrowsmith Dental Practice	2	

Secondary Care: Current Provision

Secondary care within, or servicing, the SWC area is set out within Table 32 below.

Table 32 Hospital Provision within the SWC area⁹⁰

Hospital Provision	Provider
Worcestershire Royal Hospital, Worcester: Hospital with 742 beds, delivered in 2002. Includes A&E services and complex surgery services. The Care Quality Commission (CQC) assessed urgent and emergency care at Worcestershire Royal Hospital was rated as inadequate. Medical care services had improved as of November 2017 from inadequate to requiring improvement.	AHT
Alexandra Hospital, Redditch: Hospital with over 300 beds. Whilst outside of the South Worcestershire area, this hospital now provides approximately 40% of planned surgery for the County is undertaken here. On the basis of the CQC Report, published March 2019, the Hospital was assessed as being inadequate. Particular concerns were raised about: ambulance handover delays, untimely clinical assessments and a high number of patients being cared for in corridor areas.	AHT
Evesham Community Hospital: Community Hospital and Hospice with specialist stroke rehabilitation services. CQC rated the services provided at this hospital as good across all aspects inspected. This facility is assessed as being outdated in terms of its physical infrastructure by the HCT.	AHT / HCT
Pershore Community Hospital: Community Hospital and Hospice. CQC rated the services provided at this hospital as good across all aspects inspected.	HCT
Malvern Community Hospital: Community Hospital and Hospice. CQC rated the services provided at this hospital as good across all aspects inspected.	HCT
Tenbury Community Hospital: Community Hospital, Hospice and Dentist. CQC rated the services provided at this hospital as good across all aspects inspected.	HCT

Tertiary Care: Current Provision

There is a total of 84 care homes across the South Worcestershire area.⁹¹ Of the 84 care homes within the area, two of these are run by Worcestershire County Council. The remainder are private business-led.

- **Malvern Hills:** There is a total of 21 registered care homes within the Malvern Hills district.
- **Worcester:** There is a total of 32 registered care homes within the Worcester City.
- **Wychavon:** There is a total of 31 registered care homes within the Wychavon District.

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

Demand for GP facilities

Discussions with the South Worcestershire Clinical Commissioning Group have identified that a large proportion of existing GP surgeries are at or approaching capacity. Additional growth will emphasise existing pressure on facilities from an increasingly ageing population and a move towards to provision of general practice at scale. There is particularly limited capacity within rural areas due to existing levels of growth which have not been planned for properly.

In response to IDP consultation, the Clinical Commissioning Group highlighted that there would be a focus on maximising the use of the existing estate. Delivery of expanded, or potentially new, provision in Worcestershire in response to planned levels of growth would be heavily reliant upon securing planning obligations. Work is currently being undertaken on the CCG General Practice Estates Strategy, which will set out the proposed expansion of surgeries based on the planned levels of growth within the SWC IDP.

⁹⁰ Data collected from Care Quality Commission. Available: <https://www.cqc.org.uk/search/services/hospitals?location=Worcester>

⁹¹ Data collected from the CQC. Available: <https://www.cqc.org.uk/search/services/care-homes?location=Worcestershire>

The Developer Contributions SPD 2018 and initial consultation with the CCG has been used to generate potential contributions based on broad levels of growth. It should be noted that these requirements should be treated as indicative and will evolve as the SWDP Review progresses, with indexation based on submission timescales.

Table 33 Developer Contributions for Healthcare

For qualifying sites over 50 units (see Table 2), where there is known GP capacity constraints (see Table 3):						
Proposed Number of New Dwellings (A)	Identify resultant number of GP Patients based on Household Size (B)*	Average Number of Consultations per year = 6	Capacity of a consulting room per year = 6,300	Number of additional consulting rooms required	Forecast floor area required= 16sqm* at ratio of 1:0.66 clinical / . Non-clinical	Cost per sqm= £3,400**
(A)	(B)	6	6,300	(C)	16 x 1.66	D
Developer Contributions to Healthcare = $\frac{6(A \times B)}{6,300} = C \times (16 \times 1.66) \times D$						
* Based on Census 2011 Household Sizes: 2.32 in Malvern Hills; 2.35 in Worcester and 2.36 in Wychavon.						
**Based on average GP Consulting Room of 16sq m.						
***Based on Department for Health Building cost per sq m (2018 prices).						

Using the capacity information provided by the CCG, the potential implications of levels of growth are therefore as follows:

Strategic Sites

- **Worcestershire Parkway:** Despite the proximity of the site to Worcester, the quantum of development proposals would likely warrant an additional GP surgery to be provided onsite. Most patient capacity at existing GPs has been filled through incremental changes in population as a result of smaller housing developments, however any potential capacity within existing surgeries would need to be identified through the primary care network via consultation with the CCG at pre-application stage.

- **Throckmorton Airfield:** Given the proposed location of the development, there would be an expectation that a new GP surgery would be provided onsite and secured through planning obligations relating to the site. The closest settlement is Pershore, and as such, there may be implications for the Abbotswood Medical Centre, which is assessed as being at capacity.
- **Rushwick:** Whilst new provision would be sought on the proposed allocation, there may be existing capacity and/or options to expand existing surgeries within the west of Worcester including at St. John's House Medical Centre.

Larger Settlements

- **Worcester City:** Discussions with the CCG highlighted that there was a degree of expansion across the City, however there are a number of surgeries at capacity. Ability to absorb growth would be dependent on proposed location within the urban area. EFFT Funding is being sought for expansion/replacement of Thornloe Lodge Surgery.
- **Droitwich:** Discussion with the CCG highlighted that there would be limited room to expand existing practices within Droitwich.
- **Malvern:** Discussions with the CCG highlighted that existing practices are almost at capacity, and unsuitable for expansion. There is an acute recruitment shortage of GPs in the town, the effects of which will be compounded through proposed growth.
- **Evesham:** The CCG noted that any additional development within Evesham would take all existing surgeries over-capacity. EFFT Funding is being sought for the expansion of Barn Close Surgery in nearby Broadway.
- **Tenbury:** Discussion with the CCG highlighted that any development in Tenbury would impact the capacity of the existing GP practice, which has insufficient space to expand. EFFT Funding is being sought for the expansion of Tenbury Surgery.

- **Pershore:** The CCG considered that the challenge of providing rural healthcare was prominent in Pershore, with demand for mobile doctors and technology. Growth within Pershore would likely exacerbate this challenge.
- **Villages:** The CCG noted that all villages across the SWC area have experienced growth across the previous Plan Period, however the surgeries have not grown simultaneously. There was a notable continued pressure with the villages, with demand arising from ageing populations within these areas and lack of transportation / mobility of the services offered. Incremental growth was considered to be more challenging to provide for within the settlements.

The table below applies the benchmarks set out within the Developer Contributions SPD to the proposed levels of growth in the Development Plan Review. The far right-hand columns (blue) also include outputs from the CCG's PAU calculator in terms of required additional/new floorspace and the costs associated with this.

Table 34 Developer Requirements

Site Allocation	Proposed Number of New Dwellings (A)	Identify resultant number of GP Patients based on Household Size (B)*	No. of GPs	Number of additional consulting rooms required	Forecast floor area required= 16sqm* at ratio of 1:0.66 clinical /. Non-clinical	Costs for additional floorspace	Forecast floor area required PAU space calculator (sqm)	Costs for additional floorspace exc VAT land
Strategic Sites								
Worcestershire Parkway	5,000	2.36	7.9	11.238	298.48	£1,014,844.95	736	£1,692,800.00
Throckmorton Airfield	2,000	2.36	3.1	4.495	119.39	£405,937.98	294	£676,200.00
Rushwick	1,000	2.35	1.6	2.238	59.44	£202,108.95	147	£338,100.00
Settlements								
Worcester City	1300	2.35	2.0	2.910	77.28	£262,741.64	221	£508,300.00
Droitwich	600	2.36	0.9	1.349	35.82	£121,781.39	74	£170,200.00
Evesham	200	2.36	0.3	0.450	11.94	£40,593.80	32	£73,600.00
Malvern	700	2.32	1.1	1.547	41.08	£139,670.19	74	£170,200.00
Pershore	600	2.36	0.9	1.349	35.82	£121,781.39	74	£170,200.00
Tenbury Wells	120	2.32	0.2	0.265	7.04	£23,943.46	20	£46,000.00
Upton	120	2.32	0.2	0.265	7.04	£23,943.46	20	£46,000.00
Mitton	500	2.32	0.8	1.105	29.34	£99,764.42	74	£170,200.00

Whilst it is likely that the demand for GPs will be met through expansion of existing and delivery of new surgeries, the CCG has identified new ways of working which may help to address demand. These include:

- The use of technology inc. videoconference consultations;
- Home visits / mobile GPs;
- Using sessional spaces for consultations such as village halls.

Demand for Acute Hospital Services, Secondary and Tertiary Care

The distribution and location of population growth is unlikely to have an impact due to the significant size of the catchment area for the hospitals, however overall population growth has an impact upon services.

NHS funding to CCGs responds to population growth based on historic growth populations projections, rather than the growth set out in the Development Plan. The calculation is made nationally, according to an approved formula, by DHSC. It results in annual health spending allocations, which are distributed to Local CCGs and used to commission healthcare from local providers. In Worcestershire, the main providers are WAHT and WHCT. As such, a continued dialogue between WAHT, WHCT and the South Worcestershire Councils is required throughout the plan-making and development management processes.

Both Emergency Departments in Worcestershire are operating near or at capacity, daily, despite the expansion of capacity in Worcestershire Royal Hospital's department in 2016. Demand for in-patient treatment in Worcestershire is also increasing, evidenced by growing waiting lists and high bed occupancy (frequently occupancy rates exceed 100%). The bed increase scheme completed in 2019 has yet to become fully operational and its benefits are expected to improve current operating constraints rather than to provide "growing room".

The Trust is working with Worcestershire's other health and social care organisations, to reduce acute hospital attendances and admissions. This work is

necessary to maintain clinically sustainable acute services, particularly in the face of national shortages of all grades and professions of clinical staff. The extent to which this work will be successful in containing or re-profiling demand for acute hospital care is difficult to predict in the face of a growing and ageing population. However, the Trust will continue to work proactively within the Worcestershire health and care system to maximise the safety and efficiency of acute hospital care.

Given the nature of the services provided, the HCT has stated that it is difficult to predict future demands, however the main strategy would be to retain existing community hospital services as a minimum. Funding to address gaps in provision will be sought through planning obligations on a case-by-case basis.

Larger Settlements

- **Worcester City:** There are limited options for expansion to existing provision at Royal Worcestershire, and as such, alternative ways of working such as co-location of services and sharing of resources with the other AHT Hospitals at Redditch and Kidderminster and the Community Hospitals (run by the HCT) will be key to meeting future demands. This should be outlined within the update to the AHT's 2012 Clinical Strategy and the subsequent Estates Strategy.
- **Droitwich:** Secondary healthcare is provided at Droitwich Medical Centre, which has mental health services run by the HCT. Beyond this, there is limited provision for community hospital care within the town, and a reliance on secondary care provision in Worcester and Bromsgrove. Development within the town should seek to improve out of hospital provision, such as the services at Droitwich Medical Centre.
- **Malvern:** The HCT has indicated that there will likely be sufficient capacity at Malvern Community Hospital to meet the demands associated with housing growth.
- **Evesham:** Discussions with the HCT have highlighted that Evesham Community Hospital is in need of modernisation and a replacement is being

sought with a site identified. Funding is yet to be secured with applications being unsuccessful to date.

- **Tenbury:** The HCT has indicated that there will likely be sufficient capacity at Pershore Community Hospital to meet the demands associated with housing growth.
- **Pershore:** The HCT has indicated that there will likely be sufficient capacity at Pershore Community Hospital to meet the demands associated with housing growth.

Beyond the challenges relating to physical infrastructure, the context of financial efficiency and lack of workforce will need to be addressed within the next plan period to ensure that services are effective enough to cope with the growth set out in the SWDP Review.

In terms of the future approach, the HCT has suggested that ‘Integrated Neighbourhood teams’ which provide mental and community health services alongside GPs and nursing services will be rolled out across the SWCs to provide a joined-up approach and help with improving diagnoses of mental health illness.

Demand for Social Care

In the context of an aging population, there will be greater demand for social care services for elderly people and for lifetime care for people with disabilities.

For those living at home, existing housing stock will need to be adapted to be fit for purpose. This is being tested through the One Public Estate programme. The County Council highlights that at present, there is a lack of housing for older people to downsize into. It is acknowledged that there is a need to move away from specialist forms of housing to flexible and adaptable homes that are suitable for all ages.

Whilst the County has seen significant amount of investment in private social care, this is often only accessed by those who are able to self-fund their care and it has been identified that there aren’t enough health care professionals to work

in such facilities. Worcester County Council estimates that as of May 2019, there were over 150 vacancies for nursing and care workers across the County.

Sector-specific Funding

Funding for the operation of GP surgeries is primarily secured through NHS England’s General Medical Services Contract. This is delivered through the ‘global sum’ which covers the costs of running a general practice including essential GP services. The decision to create, co-locate or expand GP and dental surgeries is a decision for each individual practice as a private business.

The delivery of new acute and community hospital infrastructure is largely reliant on opportunities to bid for funds from Central Government. The HCT has highlighted that the next round of bidding opportunities is likely to be in Spring 2020, although this won’t be confirmed until the Autumn Budget announcement. Any monies secured through the disposal of surplus land or the consolidation of services/ sites by the AHT and HCT goes into delivering front-line services.

The current South Worcestershire Council CIL Charging Schedule does not make provision for primary healthcare infrastructure directly related to the development to be funded from CIL receipts.

Summary and Conclusions

The Acute Hospitals Trust has recently concluded a service review and is implementing physical infrastructure works to improve care and to lift the Trust out of special measures. Projects delivered include a new link bridge and a new ward.

Due to the large area covered by the AHT and HCT, the proposed location of the allocations themselves will be unlikely to affect the coverage of their services. The HCT intends to apply for additional funding to deliver a replacement to Evesham Community Hospital.

Continued dialogue between AHT, HCT and the South Worcestershire Councils is required throughout the plan-making and development management processes

to understand the impact of population growth and Local Plan growth on future provision.

The Primary Care Infrastructure Fund has helped to deliver improvements/expansion at six GP surgeries to respond to increases in demand associated with the growth set out in the previous South Worcestershire Development Plan. A large proportion of the GP surgeries within the three districts are assessed by the CCG and the CQC as either approaching, being at or over capacity.

There is an expectation that new GP surgeries would be provided at Worcestershire Parkway and Throckmorton Airfield, with improvements to existing surgeries likely to be required at Rushwick.

New GP services and expansions to existing surgeries to respond to housing growth within main settlements should be provided in accordance with the standards set out within the Developer Contributions SPD, whilst also considering the requirements of the CCG assessed via the PAU calculator.

Infrastructure Assessment: Community Facilities

10 Infrastructure Assessment: Community Facilities

Responsibility for delivery

This chapter sets out an overview and assessment of community buildings, including: community centres, youth centres and libraries.

Delivery and management of community facilities is divided between the following organisations within South Worcestershire.

Table 35 Responsibilities for Delivery

Service Provider	Responsibility
Worcestershire County Council	The County Council (WCC) has a statutory duty under the 1964 Public Libraries and Museum Act to provide a comprehensive public library service. The Local Government Act (1972), Public Records Act (1958), Parochial Registers and Records Measure Act (1978) and the General Data Protection Regulations (2018) and Freedom of Information Act (2000) together place the responsibility on Worcestershire County Council for taking in and curating a wide range of archives and making them accessible. This means that the County Council must provide appropriate storing rooms, archivists and conservation provision. In addition, providing access involves the cataloguing of collections so that they can be retrieved, and on-site access to original documents.
Worcester City, Wychavon District and Malvern Hill District Councils	Responsibility for development and maintenance of a number of community facilities in South Worcestershire.
Town and Parish Councils / Voluntary and Community Groups	The local councils and voluntary/community bodies are responsible for the ownership and management of a number of existing facilities within South Worcestershire. Through bidding and fundraising, they also have an ability to deliver new services and improve existing facilities.
Worcester Community Trust	The Community Trust (WCT) is a registered charity that runs six community centres in Worcester. These centres were previously managed by the City Council before being transferred on a lease basis.

Overview of progress since the 2016 IDP

The previous IDP relied upon evidence gathered from the 2006 PPG17 assessment for Worcester, the 2013/14 Wychavon Community survey and the Malvern Hills District Council Open Space, Sport and Recreation Study (2007). The chapter specifically covered: Libraries, Faith Buildings / Village Halls and Church Halls.

- **Libraries:** The 2016 IDP established that there are 10 libraries within South Worcestershire, with two additional library links. No specific requirements were identified, however there was an indication that the County Council's focus was to engage local councils and community/voluntary groups in supporting and improving library provision.
- **Faith Buildings / Village Halls and Church Halls:** No shortfall of provision was identified in Worcester or Malvern Hills but a total of 23 halls were identified as needing refurbishment or a rebuild in Wychavon.

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).

Community buildings and halls in South Worcestershire (May 2019)⁹²: This report provides an assessment identifying needs, surpluses and deficits in recreational facilities to support the South Worcestershire Development Plan

⁹² Community buildings and halls in South Worcestershire: Final report and recommendations (SWCs Leisure and the Environment in assoc. with Ethos Environmental Planning Ltd, May 2019)

Review (SWDP). The report establishes a baseline of facilities, aims to identify areas that may be lacking provision for the community and illustrates where new or improved facilities are required.

The baseline element of the study has been informed by a desktop study, site visits and surveys which have been recorded in a facility spreadsheet. The facility spreadsheet provides an assessment of each of the facilities on the basis of condition/décor, onsite parking, internal facilities and compliance with the Disability Discrimination Act (1995) (DDA Compliance).

The following total of community buildings were assessed:

Table 36: Total quantum of community buildings in South Worcestershire

	Malvern Hills	Worcester	Wychavon
No. of facilities	48	11	74
Provision per capita	1 per 1,580 people	1 per 9,300 people	1 per 1,670 people

In terms of the survey results, 48% of respondents used local village halls/community centres on at least a monthly basis and 70% of respondents reported that overall there are enough village halls / community centres. The need for improved provision was indicated as being a need for improvements to quality rather than increasing quantity.

The most frequent uses of the community buildings are for sessional use (such as yoga or keep-fit) and for clubs and societies, with the greatest demand for venues on weekdays, particularly in the mornings.

In terms of future provision, the report sets out a standard for the provision of village halls and community buildings based on three metrics: quantity, quality and accessibility. The quantity, quality and accessibility standards set out the need for one new, improved or extended facility in the following circumstances:

Table 37: Community Facility Quantity and Quality Standard⁹³

Hierarchy category	Settlement	Standard
City and main towns	- Worcester City - Droitwich Spa - Evesham - Malvern	1 facility per 5,000 people With: 200sqm main hall 100sqm secondary hall - meeting rooms, a kitchen, storage, parking and DDA compliant - Within: - A 10min walk of development
Other towns and rural areas	- Pershore - Tenbury Wells (large rural hinterland in ward) - Upton-upon-Severn (large rural hinterland in ward) - Category 1,2,3 villages and below	1 facility per 1,500 people With: 100sqm main hall - Kitchen, meeting room/ ancillary space, parking and DDA compliant. - Within: - A 10min drive of development

Cabinet Paper: Libraries Re-modelling (18 October 2018)^[1] and (11 July 2019)⁹⁴: Worcestershire County Council currently meets its statutory duty under the 1964 Public Libraries and Museums Act through the services delivered via 21 static libraries supported by two fully volunteer-run community library links based in village halls at Welland and Martley and a mobile library which visits 175 rural locations in Worcestershire. A comprehensive digital service offer is also provided on Council's library web pages.

The October 2018 Cabinet Paper outlines the challenging financial environment within which Libraries are operating, with over £3.7m of efficiency savings have been made since 2011/12, and sets out how Worcestershire libraries have responded to this challenge by developing as community hubs offering access to

⁹³ Derived from Section 4 of the May 2019 Report.

^[1] Cabinet Paper: Agenda Item 6 – Libraries Re-modelling (Worcestershire County Council, Oct 2018)

⁹⁴ Cabinet Paper: Cabinet Paper: Libraries Re-modelling (18 October 2018)[1] and (11 July 2019)

a number of community services in one location; by becoming a 'front door' to other Council services and by diversifying their service offer to meet learning & skills and health & wellbeing needs of the communities they serve. By working with a wide range of partners, including University of Worcester, Worcestershire schools, Council service centres, Job Centres, health centres and tourist information services, almost half of Worcestershire Libraries have seen an increase in visitor numbers since 2015/16, contrary to declining library usage nationally.

The Libraries Transformation Programme, launched by Cabinet in May 2011, has delivered a comprehensive property remodelling programme, staff and management restructuring, a reduction in the Mobile Library service, investment in self-service technology and improvements in stock purchasing and management.

The July 2019 Cabinet paper outlines how the next phase of library transformation will be informed by a Library Strategy, which will set out a medium and long-term vision for the Library Service. The Library Strategy will link Worcestershire Libraries closely to Council strategy, and will strongly reflect local need. It will also reflect the results of public consultation and will set out new service delivery models that will be adopted, new sources of funding that will be pursued and new approaches to community engagement that will be delivered. A proposed Library Strategy will be presented to Cabinet in December 2019.

Worcestershire Archive Service Development Plan (2013-2018)⁹⁵: The Strategy establishes priorities for a 5-year period commencing in 2013, which aims to address gaps in current collections and continue to contribute to a better understanding of the County history.

Schemes since 2016

No additional libraries or community centres have been delivered since 2016.

Investment has been made in storage and public access facilities for cultural heritage since 2016. In addition, external grant income has contributed towards Lost Landscapes project (Heritage Lottery Funded), a new Archaeology Gallery (Severn Waste-funded) and scoping rationalisation in Museum Archaeological Collections (Society for Museum Archaeology / Historic England funding).

Assessment of Current Infrastructure Provision

Community Facilities

Table 7a) of the May 2019 report provides details of the community buildings on a ward-by-ward basis and includes comments on the improvements likely to be required. Where improvements are identified, these are included within Table 38 'Planned Schemes' of this report.

Table 38 SWC Current Sport and Recreation Infrastructure

Community Facility	Size	Quality Score %
Malvern Hills		
Alfrick and Lulseley Village Hall	Medium	79.7
Leigh and Bransford Village Hall	Medium	79.7
Suckley Village Hall	Medium	65.3
Astley and Dunley Village Hall	Medium	60.2
Holt Heath Village Hall	Medium	61
Shrawley Village Hall	Medium	83.1
Broadwas and Clothieridge Village Hall	Medium	65.3
Lower Broadheath Memorial Hall	Medium	72
Rushwick Village Hall	Medium	69.5
Malvern Vale Community Centre	Medium	82.2
The Peace Hall, Sinton Green (Grimley Peace Hall)	Medium	68.6
Hallow Parish Hall	Medium	76.3

⁹⁵http://www.worcestershire.gov.uk/download/downloads/id/4193/waas_collections_development_plan_2013-2018.pdf

Community Facility	Size	Quality Score %
Kempsey Community Centre	Medium	78.8
Severn Stoke Parish Hall	Medium	72.9
Clows Top Victory Hall	Medium	69.5
Lindridge Parish Hall	Small	64.4
Menith Wood Old Chapel Hall	Small	50
Parish Rooms (Lindridge)	Small	50.8
Bayton Village Hall	Medium	81.4
Berrow & Pendock Village Hall	Small	33.1
Bushely Village Hall	Large	85.6
Longdon Village Hall	Medium	83.1
Wichenford Memorial Hall	Small	68.6
Martley Village (Memorial) Hall	Medium	74.6
Welland Village Hall	Large	78
Castle Morton Village Hall	Small	59.3
Guarlford Village Hall	Small	61.9
Powick Parish Hall	Large	82.2
Malvern Cube	Medium	81.4
Earls Croome Village Hall	Small	27.1
Ripple Parish Hall	Medium	61.9
The Shelsleys Village Halls	Medium	69.5
Clifton upon Teme Village Hall	Medium	72
Eastham Memorial Hall	Small	66.1
Stoke Bliss & Kyre Parish Hall	Medium	81.4
The Pump Rooms	Small	50.8
The Regal (Community Centre)	Medium	76.3
Bockleton Parish Hall	Medium	61.9

Community Facility	Size	Quality Score %
Rochford Village Hall	N/A	N/A
The Memorial Hall	Large	76.3
The Upton Hill Centre	Large	93.2
Hanley Swan Village Hall	Medium	74.6
Malvern Wells Village Hall	Medium	69.5
Fisher Hall/West Malvern Village Hall	Medium	66.1
Abberley Common Village Hall	Medium	85.6
Great Witley Village Hall	Medium	78.8
Little Witley Village Hall	Medium	85.6
Pensax Village Hall	Medium	29.7
Worcester City		
St. Johns Community Centre	Medium	78.8
Horizon Community Centre	Large	86.4
King George V Community Centre	Medium	80.5
Perdiswell Young People's Leisure Club	Large	98.3
Warndon Community Centre	Medium	83.9
Ronkswood Community Centre	Large	84.7
The Tolly Centre	Medium	72
Comer Gardens Community Hall	Small	57.6
The Green Centre	Large	91.5
St.Peters Village Hall	Medium	77.1
Lyppard Grange Community Centre	Large	92.4
Wychavon		
Badsey Remembrance Hall	Small	51.7
Badsey Sports & Recreation Club	Medium	75.4
Evesham Town Hall	Large	89

Community Facility	Size	Quality Score %
Wallace House	Large	85.6
Crowle Parish Hall	Medium	71.2
Himbleton Village Hall	Medium	55.1
Tibberton Parish Hall	Small	45.8
Bredon Village Hall	Large	95.8
Bredons Norton Village Hall	Medium	61
Bretforton Community Hall	Small	47.5
Offenham Village Hall	Medium	76.3
Broadway United Reform Church	Small	66.9
Childswickham Memorial Hall	Medium	77.1
The Lifford Hall Broadway	Medium	72
Wychbold Village Hall	Medium	67.8
Drakes Broughton Village Hall	Medium	66.9
Stoulton Village Hall	Small	55.1
Droitwich Spa Community Hall	Medium	76.3
Droitwich Spa Baptist Hall	Small	60.2
Chawson Barns Community Centre	Medium	77.1
Westlands Community Hall	Medium	70.3
Sacred Heart Community Hall	Large	79.7
Birlingham Village Hall	Medium	66.1
Defford Cum Besford Village Hall	Medium	77.1
Eckington Village Hall	Medium	78.8
Strensham Village Hall	Small	58.5
Aston Somerville Village Hall	Small	45.8
Bricklehampton, Elmley Castle and Netherton Village Hall	Large	76.3
Great Comberton Village Hall	Medium	69.5
Little Comberton Village Hall	Small	62.7

Community Facility	Size	Quality Score %
Sedgeberrow Village Hall	Medium	67.2
Charlton School Rooms	Small	55.1
Crophorne & Charlton Village Hall	Medium	78.8
Fladbury Village Hall	Medium	73.7
Hartlebury Parish Hall	Medium	72.9
Harvington Village Hall	Small	60.2
Norton & Lenchwick Village Hall	Large	76.3
Honeybourne Village Hall	Small	54.2
Pebworth Village Hall	Medium	73.7
Abbots Morton Village Hall	Medium	78
Church Lench Village Hall	Medium	83.9
Cookhill Village Hall	Medium	85.6
Inkberrow Village Hall	Medium	78
Rous Lench & Radford Village Hall	Medium	64.4
Stock and Bradley Village Hall	Medium	75.4
Cutnall Green & District Memorial Hall	Large	90.7
Elmbridge Village Hall	Medium	71.2
Hampton Lovett & Westwood Parish Hall	Medium	61.9
Norton juxta Kempsey Village Hall	Medium	86.4
Whittington Village Hall	Medium	80.5
Ombersley Memorial Hall	Medium	76.3
Sytchampton Community Centre	Small	50.8
Pershore Youth Centre	Medium	77.1
Bishampton Village Hall	Large	88.1
Lower Moor Parish Hall	Medium	65.3
Pinvin Memorial Hall	Medium	68.6
Throckmorton Village Hall	Medium	72.9

Community Facility	Size	Quality Score %
Wyre Piddle Parish Hall	Small	47.5
Ashton Community Centre	Small	60.2
Beckford Village Hall	Medium	63.6
Overbury Village Hall	Medium	56.8
The Victoria Hall, Kemerton	Small	35.6
Cleeve Prior Memorial Hall	Medium	73.7
South Littleton Scout HQ	Small	39
The Littletons Village Hall	Medium	63.6
Hanbury Village Hall	Small	50.8
Kington & Dormston Village Hall	Small	66.1
Peopleton Village Hall	Large	89.8
Three Parishes Village Hall	Small	56.8
Upton Snodsbury Village Hall	Small	58.5
White Ladies Aston Village Hall	Small	20.3

Libraries

There are currently 10 public libraries in South Worcestershire. In **Worcester City**, these are at St Johns, Warndon and The Hive in Worcester. In **Malvern Hills**, these are in Malvern, Tenbury Wells, and Upton-upon-Severn. In **Wychavon**, the libraries are in Broadway, Droitwich Spa, Evesham and Pershore. Martley, Welland both have local "library links", run by volunteers supported by stock and staff at a nearby library.

Archives and Archaeology

The infrastructure required to deliver the County's statutory and non-statutory cultural heritage responsibilities is largely split across two organisations; Worcestershire Archive and Archaeology Service and Museums Worcestershire:

- **Worcestershire Archive and Archaeology Service** provides for the statutory requirements for storing, archiving and on-site access to original documents and conservation provision. These functions are delivered by the Archive and Archaeology Service from The Hive, where there are seven storing rooms and facilities for public access, conservation and digitisation.
- **Museums Worcestershire** is a joint museums service between Worcestershire County Council and Worcester City Council operating across three sites. The service manages three museum buildings and a dedicated museums store, caring for over one million artefacts. To deliver on the NPPF requirement for ensuring that heritage assets are conserved, and where appropriate enhanced⁹⁶, and for evidence to be publicly accessible⁹⁷, requires a sizeable archaeological archive that is supplied by Museums Worcestershire.

Discussions with WCC highlighted that in 2019/20, the Archive and Archaeology Service is making savings of £255,000. This results in a budget that is 35% of the core budget that the Service had when it was formed in 2011. Museums Worcestershire currently (2019/20) operates at 50% of core local authority funding received at the time that the joint service was created in 2011. Diversification of funding continues with a focus on generating income and grant funding in order to increase the organisations' resilience and sustainability. Against the backdrop of cuts in funding, however, visitor satisfaction surveys continue to show that the public are highly supportive of museums and archives, and that visitor expectations for preservation and presentation of heritage is also very high.

⁹⁶NPPF, Section 16

⁹⁷ NPPF, Paragraph 199

Despite this, WCC consider that there is inadequate provision of cultural heritage provision and archival storage. The loss of capacity in storage of archaeological archives is well documented. Historic England in their recommendations to DCMS in response to the Mendoza Review (March 2018) acknowledge this crisis and seek to improve the long-term sustainability of archaeological archives generated by developer-funded excavations.

Since 2016, Museums Worcestershire in partnership with the Archive and Archaeology Service, has carried out a scoping project, funded by Historic England, to establish the benefits and costs of rationalising the existing collections. Further work should be undertaken in 2019/20 to establish the likely future pressures on the museum infrastructure and storage requirements over the next 10-15 years.

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

Community Facilities: The requirements for community facilities associated within the growth set out within the Development Plan Review set out below are calculated by applying standards set out within Table 37 of this chapter.

Table 39 Standard for the provision of village halls and community buildings

	Local Authority (Area of interest)	Number of Homes	Population ⁹⁸	No. of Community Halls	Floorspace Required (sqm)
Parkway	Wychavon	5,000	11,500	2.3	690
Throckmorton	Wychavon	2,000	4,600	3.1	307
Rushwick	Malvern Hills	1,000	2,300	1.5	153
Worcester City	Worcester	1,300	2,990	0.6	179
Droitwich	Wychavon	600	1,380	0.3	83
Evesham	Wychavon	200	460	0.0	0
Malvern	Malvern Hills	700	1,610	0.3	97
Pershore	Wychavon	600	1,380	0.9	92
Tenbury Wells	Malvern Hills	120	276	0.2	18
Upton	Malvern Hills	120	276	0.2	18
Mitton	Malvern Hills	500	1,150	0.8	76
Rural Areas (3)[2]	All	1,860	4,278	2.9	285

Whilst in an area currently considered rural, given the size of the proposed Parkway Strategic Allocation, the cities and main towns standard (see table 3) has been applied when assessing future provision. This is because the allocation is considered to be a self-sufficient settlement and the levels of growth proposed are likely to require larger, purpose-built facilities. This settlement is anticipated to require up to 690sqm of community space.

Throckmorton and Rushwick Strategic Allocations are assessed as needing 3 and 1.5 community facilities respectively. The remaining quantum of growth is

⁹⁸ Based on a household size of 2.3 people, as derived from the SWDP.

not sufficient within each location to require a new community centre, and as such is likely to require improvement to existing facilities.

Libraries: There is no standard methodology for measuring an absolute level of need for libraries associated with growth. Worcestershire County Council is therefore required to make a value judgement on the overall relative need for Worcestershire's libraries. This is derived from deprivation, service isolation, use of the home library site and library activity levels.

The Libraries Needs Assessment (July 2019) outlines that the libraries with the highest aggregate need in South Worcestershire are Evesham, Tenbury, Malvern and the Hive, Worcester. South Worcestershire Libraries with lower aggregate need are St John's, Warndon and Broadway and Library Links at Welland and Martley. The Needs Assessment makes a number of recommendations that will be reflected in the new Library Strategy for Worcestershire:

- prioritise resources on those libraries that have been identified as having the greatest aggregate need;
- improve library participation of older age groups (65+) and the very young (0-4);
- seek solutions that reduce costs and/or increase participation in libraries which are currently least value for money inc. the Hive and St. John's;
- continue to deliver national service offers;
- ensure that public and stakeholders shape library transformation;
- seek income generating opportunities; and,
- improve the public computer network.

Sector-specific funding

Libraries: Libraries are funded by Worcestershire County Council at a cost of £9m in 2018/19.

- £300k of Libraries' overall base budget is funded by Public Health ring-fenced grant and a service level agreement is in place between Public Health and the Library Service.

- £650k of premises-related income is generated each year through rental income from services co-located in library buildings and from library meeting room hire

Community Facilities: The delivery of new community facilities largely relies upon securing obligations through the planning process to respond to new development and associated population growth. 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.

Archaeology and Archives: The Archive and Archaeology Service has an annual operating budget of around £2.2million, of which £405,000 is funded directly by Worcestershire County Council. Museums Worcestershire has an annual operating budget of around £1.2million, of which around 67% is income from Worcestershire County Council and Worcester City Council. The remainder comes from external grants and earned income.

In most cases, the **investigation and recording of archaeological remains** is usually covered by planning conditions. However, in some circumstances a Section 106 agreement may be necessary to protect and ensure the preservation of archaeological finds.

There is also a need for **facilitating access to WCC cultural resources** through outreach, education, displays and exhibitions, as well as further research into existing collections. These requirements have largely been funded through bodies such as Heritage Lottery Fund /National Lottery Heritage Fund, Historic England and Arts Council England, however these are areas where there is potential to look more widely for funding sources in the future.

Ensuring that archaeological archives are **deposited** in a suitable repository (primarily the Museums Worcestershire Collections Centre in Worcester City and Worcestershire County) is a statutory responsibility. The Collections Centre is less suitable for conventional forms of funding (e.g. HLF or Arts Council) due to its security and operational needs but investment is required to enhance access.

Conclusions

The Community buildings and halls in South Worcestershire report (2019) indicates that there is generally good coverage of community facilities across South Worcestershire, however these vary significantly in terms of quality.

Around 30 of the community facilities assessed through the report were considered to require some form of alteration, improvement or even replacement.

Future improvements or additional facilities relating to housing growth should be provided in accordance with standards set out in the report (and Table 37).

Over half of Worcestershire Libraries have seen an increase in visitor numbers since 2015/16, and it is expected that the long-term vision for provision will be presented within Library Strategy proposed to be presented to Cabinet in December 2019.

WCC consider that there is inadequate provision of cultural heritage provision and archival storage. The loss of capacity in storage of archaeological archives is well documented. Since 2016, Museums Worcestershire in partnership with the Archive and Archaeology Service, has carried out a scoping project, funded by Historic England, to establish the benefits and costs of rationalising the existing collections. Ensuring that archaeological archives are deposited in a suitable repository (primarily the Museums Worcestershire Collections Centre in Worcester City and Worcestershire County) is identified by WCC as a statutory responsibility.

Infrastructure Assessment: Sport and Recreational Facilities

11 Infrastructure Assessment: Sport and Recreational Facilities

Responsibility for delivery

This section covers the provision of both indoor leisure sports (including sports halls, swimming pools, health and fitness and other indoor facilities) and playing pitches (including football, 3G astroturf pitches, cricket, rugby, hockey, tennis, bowls and multi-use games areas). Delivery of sports and recreation infrastructure is divided between the following organisations within South Worcestershire.

Overview of progress since the 2016 IDP

Evidence base updates since 2016

The previous IDP relied upon evidence gathered through the Nortoft Study on Sports Facilities Framework (July 2010), and covered the period to 2026. Based on the contents of this document, the South Worcestershire Infrastructure Delivery Plan Interim Position Statement (SWIDPIPS) collated the schedule of requirements for the area which outlined that a new sports arena had been delivered at University of Worcester and a new swimming pool had been delivered in Worcester. A range of new sports halls, football surfaces, a tennis centre and athletics facilities were identified as being delivered in 2013 and 2014.

Following feedback from Sport England in 2016, a revised Playing Pitch Strategy was commissioned which needs to be reflected within the 2019 revised infrastructure schedule.

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

Table 40 Responsibilities for Delivery

Service Provider	Responsibility
Worcester City, Wychavon District and Malvern Hill District Councils	Responsibility for development and maintenance of parks and open spaces in the district lies with the City and District Councils.
Town and Parish Councils	Service provides responsible for the ownership and management the majority of parks and open spaces within Malvern Hills and Wychavon.
Sport England	Sport England is a public body under the Department for Digital, Culture, Media and Sport (DCMS). It was formerly known as the Sports Council, and the Royal Charter which established the organisation states that the body has the power to “develop and improve the knowledge of and practice of, education and training in, sport and physical recreation in the interests of social welfare and the enjoyment of leisure among the public at large in England.” (available: www.sportengland.org/media/10309/consolidated-royal-charter)
National Sport Governing Bodies	The Football Association (FA), England and Wales Cricket Board (ECB), Rugby Football Union (RFU), Rugby Football League (RFL) and England Hockey are the governing bodies for their respective sports. They sanction competitive sports at all levels
Community Sports Clubs	Whilst local and community sports clubs are less likely to own sports and recreation assets, they may be responsible for the maintenance and management of sports facilities.
Private Enterprises	There are a number of private businesses that provide sport and recreation opportunities through facilities such as health clubs, private gyms and

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, along with 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.

South Worcestershire Playing Pitch Strategy (July 2015)⁹⁹The Playing Pitch Strategy sets out the overall strategy for the delivery of playing fields and pitches within South Worcestershire. The strategy should be used to inform negotiations for planning obligations on new developments to provide new, or enhance existing, open space. Current demand identified within the strategy is set out in Table 41 SWC Current Sport and Recreation Infrastructure.

The Strategy includes the following principles for the provision of playing fields:

- Supply of facilities is tailored to demand;
- Maximise sustainability, including creation of strategic hub sites for sport;
- Pitch provision will be delivered in partnership;
- Developing local solutions to local issues;
- Empowering local communities and organisations to manage and improve sport and leisure provision; and,
- Investment in projects and scheme with the greatest impact.

Wychavon Sports Facility Strategy August 2016¹⁰⁰: The Sports Facility Strategy accompanies the Playing Pitch Strategy, evidencing the development of strategic priorities for the planning of sports and recreation infrastructure in Wychavon.

The Strategy sets out the context of Wychavon's ageing population, which makes up over a fifth of people, and states that adult sports participation has been decreasing. The Strategy sets out full details of the current infrastructure provision, which has been summarised within Table 41 below.

In terms of the key issues and determining a future strategy, the document sets out the following:

- A large proportion of sports hall sites are badminton courts or ancillary to badminton courts.
- Evesham Leisure Centre is at capacity, whilst the Droitwich and Pershore Leisure Centres are assessed as being at 63% and 49% capacity.
- Wychavon has enough pools and they are well located to meet needs.
- There is a reliance of communities on sports facilities in the education sector.
- There appears limited need to provide additional specialist indoor provision, with a focus on protecting and enhancing facilities.

Schemes since 2016

- Perdiswell Leisure Centre, completed in January 2017 at a cost of circa £10.5m¹⁰¹;
- £1.1m health and fitness centre improvements at Droitwich Leisure Centre¹⁰²;
- Extension to Evesham Leisure Centre and car parking, including new activity studio, more changing facilities and fitness and beauty suites⁶
- Howard Road Playing Fields improvements¹⁰³ (Informal rugby and football pitch);
- New 3G pitch and changing room provision completed in October 2019 at Langland Stadium for Malvern Town Football Club; and
- Outline planning granted for playing fields and MUGA at Newland in January 2019 (application 15/01625/OUT).
- Cinderella Ground returned to use as a cricket facility April 2019.¹⁰⁴
- Improvements were undertaken at Inkberrow Cricket Club in 2017, funded by through charitable contributions and planning obligations.

⁹⁹ Neil Allen Associates (2015) Available: <https://www.swdevelopmentplan.org/wp-content/uploads/2017/01/South-Worc-Sports-Facility-Strategy-July-2015.pdf>

¹⁰⁰ Neil Allen Associates (2016) Available at:

<https://www.wychavon.gov.uk/documents/10586/3628820/Final+Wychavon+Sports+Facility+Strategy+August+2016+%282%29.pdf>

¹⁰¹ Worcester City Council News (2017)<https://www.worcester.gov.uk/news-alerts/-/blogs/new-10-5-million-swimming-pool-puts-worcester-on-the-sporting-map>

¹⁰² Wychavon Annual Report 2018. Available:

<https://www.wychavon.gov.uk/documents/10586/3070585/Annual+Report+2018+FINAL.pdf/677ee34a-529c-1dd3-31df-fe6db5d49e36>

¹⁰³ Available: <https://www.worcesternews.co.uk/news/15553333.playing-fields-officially-open-in-howard-road-worcester-with-hopes-of-tackling-anti-social-behaviour/>

¹⁰⁴ Available: <https://www.worcesternews.co.uk/news/17609424.historic-pavilion-at-original-home-of-worcestershire-county-cricket-club-to-be-moved>

Assessment of Current Infrastructure Provision

The Playing Pitch Strategy (July 2015) (PPS) outlines the context for playing pitches for each of the three South Worcestershire Councils on the basis of the following sport provision which includes: football (grass pitches and artificial grass pitches), cricket, rugby and hockey. In relation to existing built facilities, the Wychavon Sports Facility Strategy (August 2016) outlines those within Wychavon and provides some context as to the facilities available in both Malvern Hills and Worcester. The Assessment has been informed by consultation with the South Worcestershire Councils and the South Worcestershire Sports Facilities Framework (Northtoft, 2010).

Table 41 SWC Current Sport and Recreation Infrastructure

Infrastructure	Worcester City	Wychavon	Malvern Hills
Football – Existing provision	There are 20 sites for football. There is one x AGP located at Worcester University. This is supplemented by a stock of small 3G surfaces across Worcester City.	There are 56 sites for football. There is one x AGP located at Pershore High School.	There are 31 sites for football. There is one x AGP located at Dyson Perrins School.
Football (Adult) – Adequacy of provision	Capacity is particularly restricted at peak time in Worcester City, with a lack of up to 8 pitches across the week. Pitches for 7v7 and 5v5 capacity is more likely to meet demand but has limited resilience for any growth associated with development.	There are pressures on peak time use of pitches and a lack of capacity generally in Droitwich and Pershore, with a greater amount of availability and flexibility in Evesham.	There is capacity to accommodate 4 match equivalents additional across the week for adult and youth play in the Central area. In Malvern, there is capacity for 1 additional adult match equivalent and 2 youth matches at peak time. There is little spare capacity in Tenbury and North. In Upton and South there is spare capacity for 4 additional match

Infrastructure	Worcester City	Wychavon	Malvern Hills
			equivalents on adult pitches, and 3 at peak time. There is limited capacity for 9v9 or 5v5 pitches in the district, restricted to Upton and South.
Football (Youth) – Adequacy of provision	A lack of youth pitches equates to 14 pitches across the week.	In Droitwich there is capacity for 1.5 match equivalents for youth football. In Pershore there is no spare capacity on youth pitches at peak time.	In Malvern, there is capacity for 2 additional youth matches at peak times. There is little to no capacity for youths in Tenbury and North.
Cricket – Existing provision	There are 5 sites for Cricket in Worcester.	There are 30 sites for Cricket in Wychavon.	There are 14 sites for cricket in Malvern Hills.
Cricket – Adequacy of provision	There is capacity for one adult team in Worcester East. The PPS highlights that there is no capacity in Worcester West, however this has largely been addressed by the redevelopment of the Cinderella Ground. .	There is capacity for 29 adult teams across Wychavon.	There is currently capacity for 18 adult teams across Malvern Hills. The PPS outlines a need for an additional pitch for Malvern.
Rugby – Existing provision	There is one site for rugby in Worcester.	There are 6 sites for rugby in Wychavon.	There are 7 sites for rugby in Malvern Hills.
Rugby – Adequacy of provision	There is capacity equivalent to 6 senior teams in Worcester, however there is a notable lack of training spaces which generates overplay.	There is capacity equivalent to 5.25 senior teams at Droitwich and Evesham but overplay equivalent to 3 senior pitches and 2.5 match equivalents at Bredon and Pershore respectively.	There is no spare capacity at Malvern and overplay equivalent to one senior team at Upton-upon-Severn. There is capacity equivalent to one pitch at Tenbury, but this is of poor quality.
Hockey – existing provision	There are three full sized sand-based pitches in Worcester City (University of	There are full sized sand-based pitches four in Wychavon (at De Montfort School, Prince Henrys	There are full sized sand-based pitches in Malvern Hills (at Malvern College, Malvern St. James, the

Infrastructure	Worcester City	Wychavon	Malvern Hills
	Worcester, Nunnery Wood Sports Complex and Bishops Perowne School).	School, RGS The Grange and Droitwich Leisure Centre.	Chase School, Abberley Hall School and Tenbury Hockey Club.
Hockey – adequacy of provision	There is no spare capacity in the City.	There is no spare capacity in the district.	There is no spare capacity in the district.
Swimming – existing provision	There are eight pools on five sites within Worcester; Perdiswell Leisure Centre is the sole publicly-run pool.	There are five swimming pools at four sites in Wychavon. Four pools are open to the public on three sites. The other pool, at David Lloyd Club, is a commercial pool. The second pool at Evesham is for learners and for teaching/training.	There are four swimming pools in Malvern Hills on three sites; Malvern Splash Leisure Complex, Malvern College Sports Complex, Tenbury Swimming Pool,
Other outdoor facilities – existing provision	Nunnery Wood Sports Complex includes a Local Authority-ran athletics track.	Droitwich Spa High School has a running track (community assoc.) There are a number of free public access / pay and play outdoor tennis courts at the following locations; Ashton under Hill tennis courts, Bredon Playing Field, Evesham Rowing Club, Fladbury Recreation Ground, Lido Park, Norton Parish Hall, Peopleton Playing Fields and Sands Road. There is a total of 39 Multi-use Game Areas (MUGAs) in Wychavon, although only 8 of these are available for secure community use.	None listed in evidence base.
Other indoor facilities – existing provision	The David Lloyd Club in Worcester has an indoor tennis centre and a health and fitness centre. This is a private members club.	The Pershore Campus of Warwickshire College has an indoor tennis centre. Evesham Leisure Centre, Pershore Leisure Centre and Droitwich Spa Leisure each have a health and fitness centre and squash courts.	Malvern Active includes two squash courts, a gym and a climbing wall. The Manor Park complex at Malvern has indoor bowls facilities and includes indoor tennis courts.

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

Existing Planned Schemes

The Playing Pitch Strategy sets out a three-stranded approach to responding to future needs for sports and recreation:

- protect existing playing fields;
- enhance existing playing pitches and tailor them to the requirements of users of the facilities; and
- provide sufficient playing pitches that are fit for purpose to meet current and future need.

The 2015 Playing Pitch Strategy and 2016 Sports Facilities Study set out the following site-specific priorities:

Table 42 Site-specific priorities

Infrastructure	Worcester City	Wychavon	Malvern Hills
Football – Demands	3.5 x 3G AGPs (FA Modelling calculations)	4.39 x 3G AGPs required (FA Modelling calculations)	1.63 x 3G AGPs required (FA Modelling calculations)
Football – Proposed schemes	Replacement should be required for any facilities lost. Creation of a sports hub at Perdiswell LC. To include; 2 x 3G pitches. Creation of a sports hub at Claines Lane to provide: 1 x AGP. Creation of a Hub at the West Worcester site to include 1 x AGP. Each hub would include changing, catering and social	New sports hub at Droitwich Spa High School or nearby site, including a new 3G AGP onsite. New sports hub at Pershore High School to accommodate needs for football, rugby and hockey. Includes reconfiguration of existing pitches onsite. Provision of a 3G AGP pitch at Evesham United FC. Relocation of Broadway United FC to facilitate non-sporting development. Requirements would include 1 x senior pitch, 1 each of 9v9, 7v7 and 5v5 pitches, and changing/ social facilities.	Replacement should be required for any facilities lost. 1 x 3G AGP as stadia pitch to be located at Langland Stadium - Malvern (preferred venue) or another suitable site within the Malvern assessment area. Provide 1 x AGP, 2 x 9v9 and 3 youth pitches (hub site) on the West Worcester (incorporating Howard Road

Infrastructure	Worcester City	Wychavon	Malvern Hills
	facilities as appropriate. New changing facilities at Pitchcroft. New ground and supporting facilities for Worcester City FC.	New changing rooms at Badsey Recreation Club. Improvements to Inkberrow FC pavilion. Clubhouse expansion and pitch layout improvements at Bredon FC. Drainage and surface improvements at Droitwich RFC, Wychbold Playing Fields, Crowle, De Montfort School and Drakes Broughton Playing Field.	Playing Fields) development. Circa 3 x 9v9 / youth pitches are required as well as capacity for 5v5 / 7v7 at Newlands Development. Potential extension of 1 - 2 pitches and extension to changing rooms at Spitalfield. Additional capacity equating to 2 pitches (current demand suggests 9v9 / senior required) at Kempsey Playing Fields.
Cricket – proposed schemes	New Cricket Ground for Worcester Dominies. The facility will include a pavilion with changing, social and catering facilities. Expansion of Old Elizabethans CC to include an increased pavilion and replacement of non-turf wicket.	Relocation of Evesham Cricket Club due to flooding issues. Proposed relocation would be at a multi-use sports hub and would include 2 cricket pitches and a pavilion with 4 changing rooms and training nets. Modernisation of Droitwich Cricket Club Pavilion including separate junior / senior accommodation. Expansion and improvement of Ombersley Cricket Club. The pavilion requires heating and catering facilities. Also requires 2 additional rooms to serve 2nd pitch. Expansion and improvement of Badsey Cricket Club including heating and changing rooms. Expansion and improvement of Ashton Hill Cricket Club	Expansion of Rushwick CC to adjacent site. Second Cricket ground at Malvern for Malvern and Barnards Green CCs. Expansion of Worcester Nomads to adjacent site. Second Cricket ground at Kempsey CC.

Infrastructure	Worcester City	Wychavon	Malvern Hills
		including new toilets and separate team changing. Improvement of Ashton Hill Cricket Club pavilion. Expansion and improvement of Pershore Cricket Club to include new changing rooms and pavilion improvements. Pitch improvements to Cutnall Green, Hanbury, Childswickham, Peopleton, and Eckington Cricket Clubs.	
Rugby – Proposed schemes	Community use / new development of a satellite rugby club in Worcester. Additional floodlights and new drainage systems at Worcester RFC.	Relocation of Pershore Rugby Football Club due to flooding issues. Opportunity to create hub at Pershore High School. Extension and relocation of Bredon Star RFC. 2 senior pitches and 4 mini pitches required to accommodate all activity on one site. Drainage improvements to Worcester, Droitwich and Bredon Star RFCs. Floodlights at Bredon Star, Droitwich, Evesham and Pershore RFCs.	Relocation of Malvern RFC with 4 adult pitches and 4 midi pitches, as well as appropriate floodlighting (2 pitches). Proposed to be delivered at Newlands Development. Installation of pipe drainage on two pitches at Tenbury RFC. Floodlights to also be provided. Expansion and improvement of Upton RFC to include 1 x AGP and flood resilience measures. Additional floodlights to be provided.
Hockey – proposed schemes	Resurfacing of pitch at University. 2 x new pitches for Worcester Hockey Club including	One additional sand-based pitch at Pershore. Potentially to be accommodated as part of re-location of Pershore RFC.	Resurfacing of Malvern St. James AGP.

Infrastructure	Worcester City	Wychavon	Malvern Hills
	appropriate ancillary facilities.	Resurfacing of pitches at Droitwich Leisure Centre, De Montfort School and Prince Henry's School.	
Indoor sports facilities – proposed schemes		The assessment suggests the need to provide a modern 'fit for purpose' 4-court sports hall in Pershore as part of the school redevelopment.	

To enable delivery of the above schemes, the Playing Pitch Strategy steering group has been set up, consisting of relevant stakeholders. The group's roles include: monitoring delivery, recording changes to provision, reviewing trends and other data and assuming the impacts of changes to demographics or changes to participation.

In terms of built facilities, based on population increases, it is anticipated that Droitwich Leisure Centre would be at 68% capacity, Evesham would remain at 100% capacity if not expanded, with a further 577 visits per week that would not be able to access the facilities due to a lack of capacity. Capacity at Pershore would be reduced to 53%.

Proposed Growth

Approach

Benchmarks and Multipliers: In terms of the growth set out within the Preferred Options, benchmarks and multipliers have been applied using the Sports Facility Calculator¹⁰⁵ and the Developer Contributions SPD¹⁰⁶ to understand future demands for sport and recreation facilities. The Developer Contributions SPD derives a standard of 1.2 hectares of formal sports pitches

per 1,000 residents at a cost of £100,000. Other costs are based upon Sport England's Sports facilities costs¹⁰⁷ and applied through Active Places Power.

Demand amounting to less than one full type of provision: None of the proposed allocations would result in a need for a full 3G artificial grass pitch, sports hall or swimming pool. This indicates that the best way to respond to the growth set out in the Local Plan Review would be to extend and improve existing facilities, or to provide these in combination with other types of provision and additional facilities (i.e. cafes or fitness suites). The exception to this may be to the south of Worcester, where the levels of growth proposed at Worcester Parkway and within the existing urban area would equate to circa 0.4 AGPs, 0.97 sports halls, 0.67 swimming pools. To respond to demands associated with the increased population in and around Worcester, further consideration should be given to the provision of a new sports hall and new swimming pool at Worcester Parkway, however, this should be balanced with ensuring there is sufficient demand to maintain existing provision at Nunnery Wood and Perdiswell.

Sports catchment: Communities take part in sports and recreation close to where they live, work or study. This means that people will often cross administrative boundaries to access facilities and a joined-up approach between service providers, owners and managers is required to ensure efficient delivery of services.

Expanding access to educational and private access facilities: There is a need to secure and enhance community use of educational and private member facilities through community use agreements. This is particularly important in relation to sports halls and specialist surfaces/areas such as MUGAs, where there is a reliance on schools and colleges in terms of availability.

Demand for specialist indoor and outdoor provision: There is limited demand for more specialist indoor and specialist outdoor provision, such as indoor tennis, indoor and outdoor bowls, squash, athletics and cycling tracks,

¹⁰⁵ Active Places Power. Available: <https://www.activeplacespower.com/reports/sports-facility-calculator>

¹⁰⁶ South Worcestershire Councils (2018) Developer Contributions SPD Available: <https://www.swdevelopmentplan.org/wp-content/uploads/2018/08/Developer-Contributions-SPD-2018-Revision-Approved.pdf> (Derived from 2015 Fields in Trust Benchmark Guidelines).

¹⁰⁷ Sport England Facilities costs Q2 2018 Available: <https://www.sportengland.org/media/13346/facility-costs-q2-18.pdf>

and fitness centres. It is recommended that any future funds are used to maintain and enhance existing facilities.

Rural Provision: Investment is needed to maintain and enhance village halls which provide physical activity opportunities, and development in Category 1, 2 and 3 Villages, as set out within the Local Plan Review Preferred Options should support such opportunities. Discussion with SWC officers highlighted rural growth would need to be supported by community enhancements.

Applying the standards

Following discussion with officers from the South Worcestershire Councils, the increase in demand set out in **Table 43** (overleaf) arising from the potential development locations would exacerbate existing issues beyond those noted in the playing pitch and built form strategies as follows:

- **Worcester Parkway:** On-site delivery of sports and recreation infrastructure will be sought as part of any application. The South Worcestershire Council's indicated that a two-court sports hall, four AGPs and a cricket pitch would be sought. There may be additional, as yet unidentified need in terms of rugby.
- **Throckmorton:** One 3G pitch and two grass pitches will be required to address demands. The site is located between Evesham Leisure Centre and Pershore Leisure Centre. Rugby provision is likely to be shared with nearby settlements.
- **Rushwick:** The site is located between swimming pool provision at Perdiswell Leisure Centre and Malvern Splash. There is already a demand for a second pitch expansion at Rushwick Cricket Club and the settlement would be considered to be lacking in sports hall provision.
- **Worcester:** Whilst general provision is considered to be sound, there was considered to be issues around location of demand for swimming pool provision to the west of the river. Concerns were raised regarding the quantity and quality of football provision to the west of Worcester, however it is expected that development set out in the SWDP (2016) should address this.

- **Droitwich:** There is considered to be enhancement needed at all sites. Consultation with WDC identified that Droitwich Leisure Centre is likely to require replacement/refurbishment within 5 years.
- **Evesham:** There is considered to be enhancement needed at all sites.
- **Malvern:** There is considered to be enhancement needed at all sites.
- **Pershore:** The settlement was considered to be lacking in a four court Sports Hall. There is potential for provision at Worcester Parkway to address needs at Pershore due to the existing sports hall being landlocked.
- **Tenbury Wells:** There was known cross-boundary movements here, which placed pressure on rugby and football pitches and the associated changing facilities. The swimming pool was also considered to require enhancements and there are no local facilities for hockey.
- **Mitton:** The proposed site is physically connected to Mitton in Tewkesbury Borough and would be reliant on sport and recreation facilities in Tewkesbury town. Facilities should be provided on site where possible.
- **Upton:** There was a known demand for enhancement of the Hill Centre.
- **Villages:** That there was demand for enhanced community provision alongside any sport and recreation facilities. This could include the provision of village halls (see Community Facilities chapter).

Table 43 Sports Facility Calculations for preferred growth options

Allocation	Local Authority	Number of Homes	Population ¹⁰⁸	Sports requirements				Estimated cost			
				AGPs ¹⁰⁹	Sports halls ¹⁰	Swimming pools ¹⁰	Sports pitches ¹¹⁰	AGPs ¹⁰	Sports halls ¹⁰	Swimming pools ¹⁰	Sports pitches ¹¹
Parkway	Wychavon	5,000	11,500	0.28 AGPs	0.76	0.53	10.2	£266,069	£1,793,725	£1,915,852	£870,366
Throckmorton	Wychavon	2,000	4,600	0.11 AGPs	0.31	0.21	4.1	£106,428	£717,490	£766,341	£348,146
Rushwick	Malvern Hills	1,000	2,300	0.05 AGPs	0.15	0.10	2.0	£50,530	£348,971	£373,596	£174,073
Worcester City	Worcester	1,300	2,990	0.10 AGPs	0.21	0.14	2.7	£91,879	£500,704	£519,861	£226,295
Droitwich	Wychavon	600	1,380	0.03 AGPs	0.09	0.06	1.2	£31,928	£215,247	£229,902	£104,444
Evesham	Wychavon	200	460	0.01 AGPs	0.03	0.02	0.4	£10,643	£71,749	£76,634	£34,815
Malvern	Malvern Hills	700	1,610	0.04 AGPs	0.10	0.07	1.4	£35,371	£244,280	£261,517	£121,851
Pershere	Wychavon	600	1,380	0.03 AGPs	0.09	0.06	1.2	£31,928	£215,247	£229,902	£104,444
Tenbury Wells	Malvern Hills	120	276	0.01 AGPs	0.02	0.01	0.2	£6,064	£41,877	£44,832	£20,889
Upton	Malvern Hills	120	276	0.01 AGPs	0.02	0.01	0.2	£6,064	£41,877	£44,832	£20,889
Mitton	Wychavon	500	1,150	0.03 AGPs	0.08	0.05	1.0	£26,607	£179,373	£191,585	£87,037
Rural Areas (3) ¹¹¹	All	1,860	5,428	0.11 AGPs	0.36	0.25	3.8	£122,419	£835,105	£892,985	£323,776

Sector-specific funding

The Playing Pitch Strategy outlines the following sources of funding for delivery of new facilities in South Worcestershire:

- Planning obligations
- Capital Grant Funding
- National Governing Body support
- Council capital funding

- Education and Further Education Capital Funding/Programmes

The majority of investment in sports and recreation facilities is reliant upon securing obligations through the planning process. This helps to improve facilities in response to new development and associated population growth which generates additional demand for playing fields and other amenities.

¹⁰⁸ Based on a household size of 2.3 people, as derived from the SWDP.

¹⁰⁹ Derived from the Sports Facility Calculator. Available: <https://www.activeplacespower.com/reports/sports-facility-calculator>

¹¹⁰ Derived from the Developer Contributions SPD standard of 1.2 hectares of formal sports pitches per 1,000 residents at a cost of £100,000.

¹¹¹ Based on mean average of Wychavon and Malvern Hills review of Active Places power.

Whilst Local Authority finances are currently under pressure, there is capital for investment in sports and recreation facilities through individual school capital grants and Sport England.

Sport England's funding comes in five forms; small grants of £300-£10,000 for projects, community asset funds for enhancing community spaces, the workforce diversity fund which aims to diversify sports coaching and participation, the strategic facilities fund for investment in new infrastructure and the major events engagement fund which promotes legacy benefits associated with events such as the Olympics.

Beyond this, the delivery of new sports facilities and enhancement and expansion of existing facilities often relies on funding from local and national charitable trusts, the Lottery and local fundraising efforts.

Summary and Conclusions

The Playing Pitch Strategy (July 2015) and the 2016 Sports Facilities Study provide a detailed assessment of the quantity and quality of existing sports and recreational facilities. This highlighted that there was generally a lack of capacity for football and hockey in South Worcestershire, however there was some capacity for cricket and rugby. Demand for indoor facilities and swimming pools has increased over the last five years and new facilities have been delivered including Perdiswell Leisure Centre and the expansion of Evesham and Droitwich Leisure Centre.

There is an expectation that sport and recreational facilities will be provided onsite to meet demands on Strategic Allocations, whilst for the main settlements there is a need to improve and/or expand existing sports facilities to cope with increased demand.

Infrastructure Assessment: Green Infrastructure and Open Space

12 Infrastructure Assessment: Green Infrastructure and Open Space

Overview and Responsibilities for Delivery

This chapter covers the provision of parks and open spaces, greenways, multi-user trails, rights of way, wildlife sites, and river and canal corridors. Table 44 sets out the organisations that are responsible for the delivery, maintenance and management of green and blue infrastructure within South Worcestershire.

Overview of changes since the 2016 IDP

The previous IDP was informed by the Green Infrastructure Partnership and the Green Infrastructure (GI) Strategy for Worcestershire, which was published in 2013. The GI Strategy established spatial priorities for green infrastructure in Worcestershire. Quality of the natural and historic environment and socio-economic status has been considered to identify high-level priorities to inform the Partnership's approach to GI in different areas of the county.

Policy and Literature Changes

Since the 2016 IDP, the following updates to policy and literature have been undertaken:

Revised National Planning Policy Framework (2019): The NPPF is underpinned by the principles of sustainable development, including the objective to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change.

Section 15 of the NPPF sets out that planning policies and decisions should contribute to and enhance the natural and local environment. This includes protecting and enhancing valued landscapes and minimising impacts on and providing net gains for biodiversity.

Table 44 Responsibility for delivery

Service Provider	Responsibility
Worcestershire County Council	Worcestershire County Council (WCC) Strategic Planning and Environmental Policy Team is responsible for strategy and concept planning for green infrastructure. This includes resourcing the Green Infrastructure Partnership and maintaining the Worcestershire Habitat Inventory. As the Highways Authority, has a statutory duty to protect the legal rights of the public to use and enjoy the existing public rights of way network, maintain verges.
City and District Councils	Responsibility for development and maintenance of parks and open spaces in the district lies with the City and District Councils.
Town and Parish Councils	Local councils are responsible for the ownership and management the majority of parks and open spaces within Malvern Hills and Wychavon.
Worcestershire Green Infrastructure Partnership	The Partnership consists of the seven local authorities and other bodies including statutory agencies such as English Heritage, the Environment Agency, the Forestry Commission and Natural England and voluntary organisations such as Sustrans, Woodland Trust, the Worcestershire Biological Records Centre and the Worcestershire Wildlife Trust. The Partnership is responsible for producing the Green Infrastructure Strategy for the county and its implementation. It also works with developers to aid the delivery of new assets and ensure that site design incorporates sufficient green infrastructure.
Worcestershire Local Sites Partnership	The Partnership consist of Worcestershire's seven local authorities, the Worcestershire Wildlife Trust, Earth Heritage Trust, Worcestershire Biological Records Centre, Natural England, Forestry Commission, Environment Agency, Kemerton Conservation Trust, The Partnership is responsible for approving any new sites put forward for listing as county Local Sites and then ensuring the endorsement/adoption of those sites by their own organisations. The Partnership is responsible for ensuring that reporting on Local Site condition is undertaken on an annual basis to contribute to the monitoring of progress against national and local indicators and Worcestershire State of the Environment targets.

Plans should take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure.

Planning Practice Guidance (PPG) (2019): The PPG defines the spaces and assets which make up green infrastructure. It sets out that green infrastructure is a natural capital asset that provides multiple benefits, at a range of scales.

Strategic policies can identify the location of existing and proposed GI networks and set out appropriate policies for their protection and enhancement. This

should be informed by GI frameworks, assessments of the quality of GI and any gaps in current provision.

The PPG outlines the capability of Local Planning Authorities to designate Local Green Spaces and its role to benefit communities. It should, however, not be used to undermine the identification of land in suitable locations to meet development needs.

Worcestershire Green Infrastructure Strategy and Infrastructure Frameworks (2013): The existing 2013-2018 Green Infrastructure Strategy remains the most up-to-date reference for the green infrastructure context in Worcestershire and the approach to delivering new green infrastructure.

The assessment outlines that much of South Worcestershire has high quality GI, which should be protected and enhanced, with small areas sporadically distributed across the three districts that should be protected and restored. Four areas have been identified for restoration and creation; at Defford to the south of Worcester, at Bredicot to the east of Worcester, and at Bickmarsh and Long Marston in eastern Wychavon on the boundary with Warwickshire.

Viability, valuation and funding of green infrastructure on new development sites (2015): This document, prepared by Worcestershire County Council's Strategic Planning and Environmental Policy Team, sets out guidance on the viability, valuing and costing of GI to support implementation of GI on development sites. It highlights that the provision of GI can uplift land values, provide solutions such as flood attenuation or biodiversity enhancement and reduce the need for grey infrastructure (conventional flood management solutions).

The document advocates the use of the Green Infrastructure Valuation Toolkit¹¹² to understand the quantitative benefits of implementing GI.

South Worcestershire Developer Contributions Supplementary Planning Document (2018): The SPD sets out the requirements for the provision of green

spaces and community uses in new development based on Policy SWDP39 of the SWDP (2016). This outlines that all development exceeding five dwellings (net) is required to provide amenity space, equipped play space, cemeteries/churchyards, civic space, and allotments.

The following benchmarks are expected to be applied to development:

Table 45 SWC Developer Contributions SPD benchmarks for open space

	Malvern Hills	Worcester	Wychavon
Open Space type	Hectares per 1,000 population		
Amenity	2	1.11	1.03
Equipped Place Space	0.04	0.61	0.04
Cemeteries	0.41	N/A	N/A
Civic space	0.03	0.03	0.03
Allotments	0.14	0.4	0.39
Formal pitches	N/A	N/A	N/A
Total	2.62	2.15	1.49

The benchmarks are on the basis of an average household size of 2.32, 2.35 and 2.36 people in Malvern Hills, Worcester and Wychavon respectively.

South Worcestershire Open Space Assessment (2019): The Open Space Assessment has been prepared by Ethos Environmental Planning as part of the SWC Development Plan Review. The Study examines local needs for a wide range of different types of open space and sets out quantity, quality and accessibility standards for these different types. Although the SPD provides detailed standards which planning applications are currently assessed against, the Open Space Assessment provides an updated 'cost calculator' for appraising the quantum of provision and thresholds for when provision should be made on-site.

¹¹² Mersey Forest (2018) Green Infrastructure Valuation Toolkit. Available: <https://www.merseyforest.org.uk/services/gi-val/>

Table 46 Standards and Costs for providing open space¹¹³

	Standard per person	Cost of provision	
		Cost / m ²	Contribution per person
Allotments	3	£22.34	£67.02
Parks and Recreation grounds	17	£92.94	£1,579.98
Play Space (Children)	0.5	£168.76	£84.38
Play Space (Youth)	0.5	£168.76	£84.38
Amenity green space	7	£20.24	£141.68
Natural green space	10	£20.24	£202.40
	38		£2,159.84

Table 47 On- or off-site provision¹¹⁴

Type of provision	6 – 19 dwellings	20 – 49 dwellings	50 – 99 dwellings	100 – 199 dwellings	200+ dwellings
Allotments	Off-site	Off-site	Off-site	On-Site	On-Site
Parks and Recreation grounds	Off-site	On-Site	On-Site	On-Site	On-Site
Play Space (Children)	Off-site	Off-site	Off-site	Off-site	On-Site
Play Space (Youth)	Off-site	Off-site	On-Site	On-Site	On-Site
Amenity green space	Off-site	Off-site	Off-site	Off-site	On-Site
Natural green space	Off-site	Off-site	Off-site	On-Site	On-Site

Schemes since 2016

Since 2016, GI concept plans have been produced by the Worcestershire GI Partnership for the following strategic development sites:

- West of Worcester Urban Extension
- Worcester South Urban Extension
- Newlands, Malvern
- Worcester Technology Park (now known as Worcester 6)
- Worcestershire Parkway

These concept plans provide a framework for the development of masterplans for landscape-led schemes, with aim and objectives that the partners to the concept plan (the GI Partnership and the Councils) expect to see addressed in the development of site by applicants.

Consultation with Worcestershire County Council in September 2019 has revealed that two of these plans has been implemented to date, due to delays in site delivery and the grant of planning permission. At Worcester 6, the development has incorporated existing wet grassland and ancient woodland into the proposals, enhancing and protecting where necessary. In addition, there are works underway to re-naturalise the Barbourne Brook to provide flood attenuation/defence¹¹⁵.

At Worcestershire Parkway, the development of the station has been via a landscape-led approach to ensure the delivery of green infrastructure, enhanced biodiversity and SuDS attenuation¹¹⁶.

¹¹³ South Worcestershire Open Space Assessment (Ethos Environmental Planning 2019)

¹¹⁴ South Worcestershire Open Space Assessment (Ethos Environmental Planning 2019)

¹¹⁵ Worcestershire Sub-Regional Green Infrastructure Steering Group (2014) Worcester Technology Park Concept Plan

¹¹⁶ Worcestershire Sub-Regional Green Infrastructure Steering Group (2018) Worcester Parkway Concept Plan

Assessment of Current Infrastructure Provision

For each type of open space within the district, the quantity and distribution of current infrastructure is set out within the following section.

Strategic GI Assets

The majority of the South Worcestershire is considered to be of high GI quality. This is particularly the case in the north and west areas, which are characterised by the Malvern Hills and Commons and the Teme Valley. The Worcestershire Green Infrastructure Strategy¹¹⁷ outlines that the following strategic GI assets within South Worcestershire are of high quality.

Table 48 High Quality Strategic GI assets

Site name	District
The Malvern Hills (incl Malvern Common, North Hill, Sugar Loaf Hill and Worcestershire Beacon, Castlemorton Common, Coombe Green, Hollybed, Shadybank Commons)	Malvern Hills
River Avon	Wychavon
River Severn	Malvern Hills & Worcester City
River Teme	Malvern Hills
Worcester and Birmingham Canal	Bromsgrove & Worcester City
Droitwich Canals	Wychavon
Shrawley Wood	Malvern Hills
Kempsey Common	Malvern Hills
Worcester Woods Country Park	Worcester City

Parks and Open Spaces

The following table set out the current level of **provision for open space provision within the three district authorities from the South Worcestershire Open Space Assessment (2019).**

Table 49 Current infrastructure provision in three districts

	Malvern Hills (Existing Hectares)	Worcester (Existing Hectares)	Wychavon (Existing Hectares)
Allotments	9.38	27.36	47.25
Amenity Greenspace (>0.15ha)	81.15	55.84	76.49
Parks and Recreation Grounds (including Outdoor Sport (Fixed) and Outdoor Sport (Private))	119.33	179.21	217.49
Parks and Recreation Grounds	62.50	135.50	128.08
Outdoor Sport (Fixed)	0.61	1.36	1.99
Outdoor Sport (Private)	56.22	42.35	84.70
Play (Child)	3.41	4.18	7.24
Play (Youth)	0.92	0.74	1.41
Accessible Natural Greenspace	1,784.31	173.05	654.07
Cemeteries and Churchyards	56.11	24.81	69.81
Education	154.43	119.33	141.49

¹¹⁷ Worcestershire County Council (2013-2018) Green Infrastructure Strategy.

Wildlife Sites

Worcestershire has a rich and diverse countryside which includes areas of international, national, county and local importance:

- Two National Nature Reserves (NNR); Bredon Hill and Foster's Green Meadows¹¹⁸.
- Two Special Area of Conservation (SAC's); Bredon Hill and Lyppard Grange Ponds¹¹⁹.
- 76 Sites of Scientific Interest (SSSI's)¹²⁰; 31 sites within Wychavon and 45 sites within Malvern Hills.
- 365 Local Wildlife Sites (LWS's)¹²¹.

Approximately 90%¹²² of the Bredon Hill NNR is considered to be in favourable condition. The whole of Foster's Green Meadows NNR is considered to be of a favourable condition.¹²³

Five of the SSSI's are assessed as being in an adverse condition. These relate to; inappropriate water levels, water abstraction, inappropriate man-made structures in water and agricultural grazing.

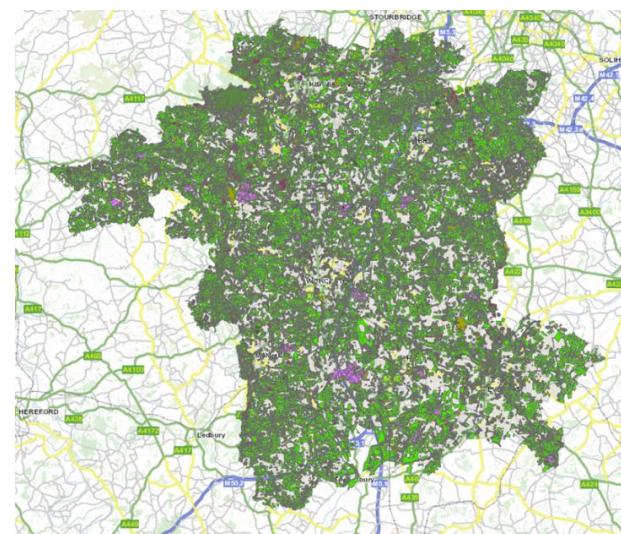
A detailed assessment of the quality of the SSSIs and NNRs is provided on Natural England's Designated sites website:
<https://designatedsites.naturalengland.org.uk>

The County Council manage a variety of 'Countryside Sites', which includes Common land, picnic places, riverside parks and the Worcester Woods Country Park. There is a total of 12 Countryside sites in South Worcestershire. The list is available: <http://www.worcestershire.gov.uk/directory/47/>.

Worcester Woods Country Park consists of two nature reserves, open fields and ancillary facilities including a café and play area. The park has been awarded Green Flag status annually, which is an international award for the maintenance of green spaces. The park is managed through a 10-year plan which aims to balance recreation and biodiversity.

The Worcestershire County Council 'Worcestershire Habitat Inventory' maps woodland, parkland, orchards, grasslands and heathland as well as various habitat networks. These can be seen within Figure 9. The main areas of woodland can be seen in bright green, with orchards and grasslands in dark/mid-green and heathland identified within dark green and brown. Parkland is identified in pink.

Figure 9 Map of Green Infrastructure within Worcestershire (Source: WCC)



¹¹⁸ Worcestershire's National Nature Reserves. Available: <https://www.gov.uk/government/publications/worcestershires-national-nature-reserves>

¹¹⁹ Joint Nature Conservation Committee (2019) 'SACs in England'. Available: <https://sac.jncc.gov.uk/site/england>

¹²⁰ Natural England Designated Sites View. Available: <https://designatedsites.naturalengland.org.uk/>

¹²¹ Worcestershire County Council. Available: http://www.worcestershire.gov.uk/info/20014/planning/1025/worcestershire_local_sites_partnership

¹²² SSSI Condition Summary, Bredon Hill. Available: <https://designatedsites.naturalengland.org.uk/ReportConditionSummary.aspx?SiteCode=S1001495&ReportTitle=Bredon%20Hill%20SSSI>

¹²³ SSSI Condition Summary, Bredon Hill. Available: <https://designatedsites.naturalengland.org.uk/ReportConditionSummary.aspx?SiteCode=S1004455&ReportTitle=Foster's%20Green%20Meadows%20SSSI>

Rivers and Canals

The Worcestershire Local Flood Risk Management Strategy (WCC, March 2016) and South Worcestershire Councils Level 1 Strategic Flood Risk Assessment (JBA Consulting, August 2019) outlines that there are the following main blue infrastructure assets within South Worcestershire.

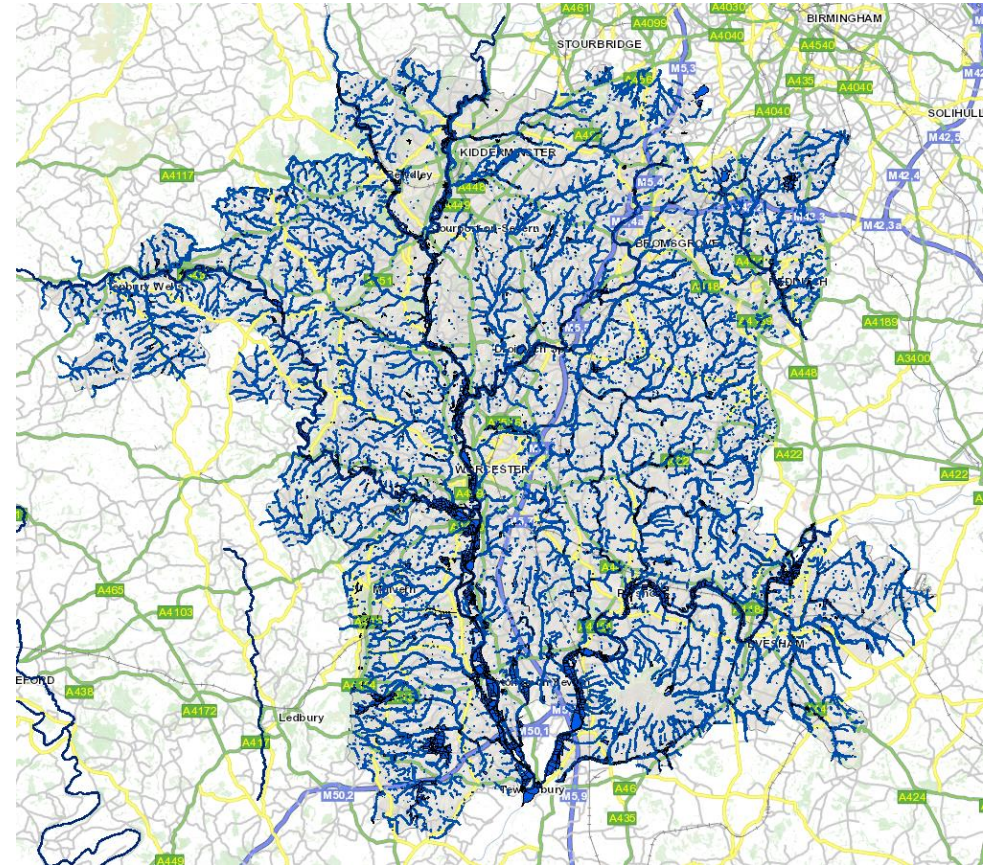
Table 50 Blue Infrastructure within Worcestershire

Main Rivers	River Severn, River Teme and River Avon
Tributaries	River Salwarpe, River Badsey, River Isbourne, River Rea, Battleton Brook, Merry Brook, Carrant Brook, Babourne Brook, Elmbridge Brook, Kyre Brook, Dick Brook and Pool Brook
Canals	The Worcester and Birmingham Canal and the Droitwich Canals

The County's blue infrastructure (waterbodies and watercourses) is mapped within Figure 10. The main rivers are mapped in dark blue with tributaries in light blue.

The LFRS and SFRA do not provide an assessment of the recreational function of the blue infrastructure within Worcestershire. The Green Infrastructure Framework (Part 2, WCC 2013) outlines that there are pressures on blue infrastructure assets in the north and centre of the county from over-abstraction and that the vast majority of all watercourses across the region are at risk of failing the Water Framework Directive targets to meet 'good status' by 2027. A number of the blue infrastructure assets are affected by pollution, agriculture and physical modifications.

Figure 10 Map of blue infrastructure within Worcestershire (Source: WCC)



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

Planned Schemes

Appendix A9 sets out the planned schemes within the South Worcestershire area. These should be treated as outline estimates, and subject to the development of a business case to clarify actualised costs.

Planned Growth Locations

Worcestershire County Council has produced a map indicating the overall spatial approach to GI across different parts of the County. This map, shown in Figure 11 demonstrates a three-tier approach to the management of GI dependent upon the quality of the character area:

- 1) Protect and enhance those areas with the greatest GI value
- 2) Protect and restore those areas with medium GI value
- 3) Restore and create those areas with the lowest GI value

In addition, each area is assessed in terms of quality as average, good or premium. Urban areas have not been surveyed.

This assessment approach is described in more detail within the diagram to the right.

Table 51 Spatial approach to GI management at development locations

Location	Quality	Spatial Approach
Worcestershire Parkway	Average	Restore environmental quality.
Throckmorton	Average	Restore environmental quality.
Rushwick	Good	Restore environmental quality.
Worcester City	Urban	Urban un-surveyed area.
Worcester Business Park	Urban	Urban un-surveyed area.
Droitwich	Urban / average	Urban un-surveyed area with surrounding area requiring restoration of environmental quality.

Location	Quality	Spatial Approach
Evesham	Urban / good	Urban un-surveyed area with surrounding area requiring protection and enhancement.
Malvern	Urban / good	Urban un-surveyed area with surrounding area requiring protection and enhancement.
Pershore	Urban / good	Urban un-surveyed area with surrounding area requiring protection and enhancement.
Tenbury Wells	Average	Protect and enhance environmental quality.
Upton	Average	Restore environmental quality.
Mitton	Good	Restore environmental quality.

Figure 11 Spatial Approach to managing Green Infrastructure (Source: WCC)

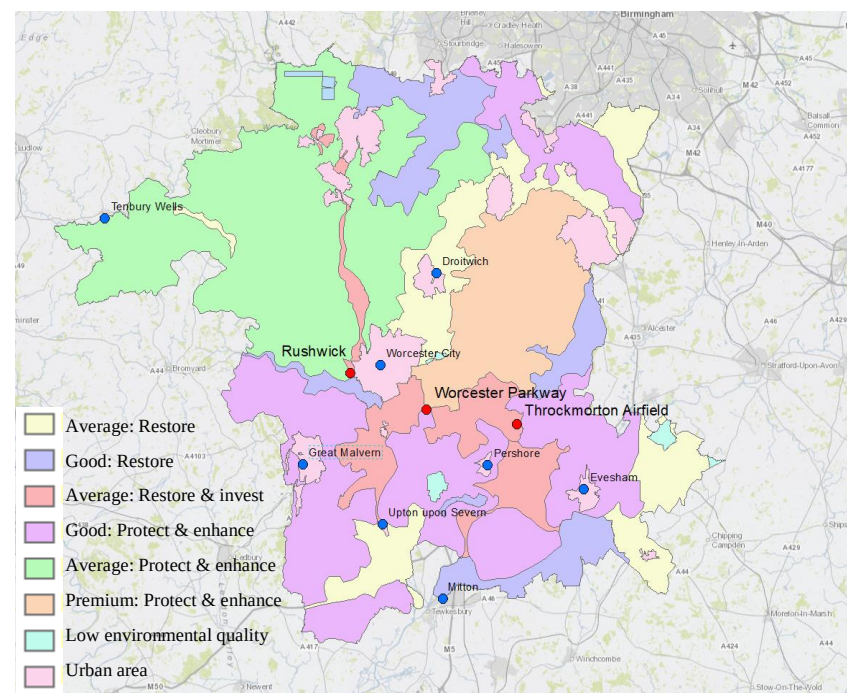


Table 52 sets out the proposed approach to implementing and managing green infrastructure at the Development Plan Review Growth Locations as advised by South Worcestershire Councils and using the standards set out within Sections 6.0 and 8.7 of the South Worcestershire Open Space Assessment (2019).

Table 52 A benchmarked approach to Green Infrastructure Requirements and Obligations

Growth Location	Number of Homes	Allotments		Parks and Recreation ground (Combined)		Play Space (Children)		Play Space (Youth)		Amenity green space		Natural green space		Total	
		Total Ha	Total Cost	Total Ha	Total Cost	Total Ha	Total Cost	Total Ha	Total Cost	Total Ha	Total Cost	Total Ha	Total Cost	Total Ha	Total Cost
Parkway	5,000	6.41	£784,134.00	36.32	£18,485,766.00	1.07	£987,246.00	81.20	£25,270,128	14.96	£1,657,656.00	21.37	£2,368,080.00	81.20	£25,270,128
Throckmorton	2,000	2.56	£313,653.60	14.53	£7,394,306.40	0.43	£394,898.40	32.48	£10,108,051	5.98	£663,062.40	8.55	£947,232.00	32.48	£10,108,051
Evesham	200	0.26	£31,365.36	1.45	£739,430.64	0.04	£39,489.84	3.25	£1,010,805	0.60	£66,306.24	0.85	£94,723.20	3.25	£1,010,805
Droitwich	600	0.77	£94,096.08	4.36	£2,218,291.92	0.13	£118,469.52	9.74	£3,032,415	1.79	£198,918.72	2.56	£284,169.60	9.74	£3,032,415
Pershore	600	0.77	£94,096.08	4.36	£2,218,291.92	0.13	£118,469.52	9.74	£3,032,415	1.79	£198,918.72	2.56	£284,169.60	9.74	£3,032,415
Mitton	500	0.64	£78,413.40	3.63	£1,848,576.60	0.11	£98,724.60	8.12	£2,527,013	1.50	£165,765.60	2.14	£236,808.00	8.12	£2,527,013
Worcester City	1,300	1.67	£203,874.84	9.44	£4,806,299.16	0.28	£256,683.96	21.11	£6,570,233	3.89	£430,990.56	5.56	£615,700.80	21.11	£6,570,233
Rushwick	1,000	1.28	£156,826.80	7.26	£3,697,153.20	0.21	£197,449.20	16.24	£5,054,026	2.99	£331,531.20	4.27	£473,616.00	16.24	£5,054,026
Malvern	700	0.90	£109,778.76	5.09	£2,588,007.24	0.15	£138,214.44	11.37	£3,537,818	2.09	£232,071.84	2.99	£331,531.20	11.37	£3,537,818
Tenbury Wells	120	0.15	£18,819.22	0.87	£443,658.38	0.03	£23,693.90	1.95	£606,483	0.36	£39,783.74	0.51	£56,833.92	1.95	£606,483
Upton	120	0.15	£18,819.22	0.87	£443,658.38	0.03	£23,693.90	1.95	£606,483	0.36	£39,783.74	0.51	£56,833.92	1.95	£606,483
Rural Areas	1,860	2.38	£291,697.85	13.51	£6,876,704.95	0.40	£367,255.51	30.21	£9,400,488	5.56	£616,648.03	7.95	£880,925.76	30.21	£9,400,488

Summary of Requirements

This chapter considers the potential sites put forward for allocation under the South Worcestershire Infrastructure Study 2019. In consideration, WCC has set out its response regarding the impact of the proposals on green infrastructure. It is expected that all new development sites exceeding 5 dwellings should make provision for green space and outdoor community facilities in accordance with the standards set out in the and Open Space Assessment (2019), and as assessed within Table 52.

Overall approach

On larger residential sites, developers will be required to provide open spaces onsite to secure approval of a planning application. Where new provision of open space is made either within a development or elsewhere, developers will also be required to provide secure arrangements for its future management and maintenance. The approach for securing these arrangements will differ and would need to be considered on a case-by-case basis to determine whether the management of these green spaces is best secured via a management company, estate management charges or by adoption by a local authority.

The green infrastructure requirements based on the pre-submission sites are outlined below have been developed using inputs from the SWCs and Worcestershire County Council but will be subject to further work as the site planning progresses.

- **Strategic Sites:** Growth proposed on strategic allocations at Worcestershire Parkway, Rushwick and Throckmorton will require the full breadth of green infrastructure provision to the standards outlined above. Opportunities to restore existing green infrastructure assets should be sought. The Open Space Assessment 2019 identifies a deficit in allotment provision, amenity greenspace and youth play at **Worcestershire Parkway (Upton Snodsbury)**; deficits in allotments, parks and recreation grounds and child play at **Rushwick (Hallow Ward)**; and, a shortage of amenity greenspace and children / youth play at **Throckmorton (Persore)**.

- **Worcester:** The proposed development approach is one of urban intensification. As such, green infrastructure will be sought on sites of 5 dwellings or greater. Where this is not possible, contributions towards the expansion or improvement of existing assets will be sought in accordance with the Developer Contributions SPD.
- **Main settlements¹²⁴:** It is expected that green infrastructure should be provided onsite for development of greater than 5 dwellings. Where this cannot be incorporated into proposals, then contributions towards the enhancement of nearby open spaces should be provided in accordance with the Developer Contributions SPD.
- **Category 1, 2 and 3 villages:** Green infrastructure provision will be assessed on a case-by-case basis, with contributions to offsite green space enhancements sought where there is no local surplus of open space.

Sector-specific Funding

In terms of funding the delivery of green infrastructure, developers are expected to provide green infrastructure to meet the needs of future residents. This could be delivered onsite or secured through planning obligations to make enhancements to existing green infrastructure assets.

The Rural Development Programme for England previously allocated £55m for schemes in the West Midlands, however this was funding by the European Union and as the long-term future is changing, this will be replaced by the Environment Land Management Scheme (ELMS) and Payment for Ecosystem Services. Both these schemes are funded by the Department for Environment, Food and Rural Affairs (DEFRA).

Funding is potentially available for some strategic green infrastructure projects the National Lottery, particularly where the community is involved.

¹²⁴ Malvern, Droitwich, Evesham, Persore, Tenbury Wells, Upton and Mitton.

The Defra 25-year Environment Plan¹²⁵ sets out various funding initiatives for restoring, protecting and enhancing the natural environment, including £10m for peatland grant schemes, £15m for natural flood management (for which Worcestershire has secured some monies) and £10m for encouraging children to undertake outdoor activities.

Conclusion

Green Infrastructure within South Worcestershire is generally of high quality, with a general approach for protection and enhancement. Small areas sporadically distributed across the three districts are assessed as requiring restoration.

The Developer Contributions SPD 2018 sets out clear space and cost requirements for a variety of different open spaces for new development. This should be used as a benchmark to assess development proposals against through the development management process.

In terms of overall strategy, there is an expectation that open spaces are provided onsite where possible, and if this is not possible, contributions towards the expansion or improvement of existing assets will be sought.

¹²⁵

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf

Infrastructure Assessment: Emergency Services

13 Infrastructure Assessment: Emergency Services

Responsibility for delivery

Delivery of emergency services infrastructure is divided between four organisations within South Worcestershire.

Table 53 Responsibilities for Delivery

Service Provider	Responsibility
West Mercia Police (WMP)	WMP is responsible for policing Herefordshire, Shropshire, Telford & Wrekin and Worcestershire, covering circa 2,900 square miles. As of April 2019, there were 4,410 officers, staff, PCSOs, Special Constables and Volunteers.
Hereford & Worcester Fire and Rescue Service (HWFRS)	HWFRS covers Herefordshire and Worcestershire, a total of 1,500 square miles. Its duties include fire prevention, fire safety, firefighting and rescues, including from road traffic collisions and other emergencies, such as flooding.
West Midlands Ambulance Service (WMAS)	WMAS provides ambulance services for an area of more than 5,000 square miles made up of Shropshire, Herefordshire, Worcestershire, Staffordshire, Warwickshire, Coventry, Birmingham and Black Country conurbation. It has 4,500 staff.
Place Partnership	Place Partnership manages the estates of Worcestershire County Council, West Mercia Police, Warwickshire Police and Hereford & Worcester Fire and Rescue Service. The company is wholly owned, funded and run by these public bodies.

Overview of progress since the 2016 IDP

The previous IDP highlighted that all three emergency services were in the process of adapting to respond to austerity measures, delivering efficiencies in the service and making financial savings:

- This has taken place through initiatives such as the co-location of HWFRS and WMP at Hindlip Park and the Probation Service at Worcester Police Station.

Further significant savings have been made through actions such as the successful deployment of mobile working and improved ICT systems. The existing estates of WMP and HWFRS continue to be under review, to ensure maximum efficiencies and savings are yielded.

- A programme of consolidation and disposal of surplus estate was outlined as being required by the WMAS. The future strategy for a ‘Make Ready’ model was implemented, which relies upon centralised hubs inclusive of full fleet facilities and logistical management supported by a network of Community Ambulance Stations. This enables checks to be undertaken by specialist staff, increasing the time paramedics can spend responding to emergency calls.

Revised National Planning Policy Framework (2019) (NPPF): Paragraphs 8, 26, 32 and 92 of the NPPF together confirm that sustainable development means securing a safe environment through the delivery of social infrastructure needed by communities. In this respect, 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 by 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.

The above policy requirements are included because the NPPF seeks 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). Planning policies and decisions are expected to deliver this.

Warwickshire Police and West Mercia Police Estates Management Strategy (2018-2025)¹²⁶: This document outlines the vision for West Mercia Police, the property portfolio and a strategy to ensure the estate continues to support the

¹²⁶ https://www.warwickshire-pcc.gov.uk/wp-content/uploads/2018/05/Estates-Management-Strategy-2018-25-vRK.Final_.pdf?x94727

delivery of police services. It is a document that, at the time of writing, is in the process of being replaced.

The new Operations and Communications Centre (OCC) at Hindlip Park is the communications centre for the 999 and 101 calls to WMP and HWFRS. It covers Worcestershire, Herefordshire, Shropshire and Telford & Wrekin. The OCC became fully operational in July 2019. The HWFRS Headquarters re-located to Hindlip Park in November 2018, thereby delivering the co-location plans announced previously.

Hereford & Worcester Fire and Rescue Service Asset Management Strategy 2017-2020¹²⁷: This strategy sets out how HWFRS will manage, maintain and develop its assets. The strategy aims to have the right people with the right equipment and vehicles operating from a range of fit for purpose buildings, at the right time.

The Strategy highlights that demand for the fire service is changing because of substantial reductions in the number and impact of fires. The strategy focuses on three infrastructure needs; fleet, equipment and property.

The Service focuses on delivering best value in terms of investment and finding cost-effective solutions, planning for the use of an asset for its lifetime including its disposal. The Services sets out that it will work with partner organisations to deliver services.

West Midlands Ambulance Service NHS Foundation Trust Quality Report 2017: This report sets out the result of an unannounced inspection of the WMAS in June/July 2016. It sets out that WMAS has; 368 ambulances, 106 rapid response vehicles and 90 ambulance stations. Patient transport services in South Worcestershire operate from the PTS Worcester site.

Table 54 SWC Current General Practitioner Healthcare Infrastructure

Infrastructure	Provider
Hindlip Park, Worcester: Multi-agency Headquarters for WMP and HWFRS with over 1,000 staff. New Operations and Communications Centre delivered in 2019.	WMP / HWFRS
Worcester Police Station	WMP
Worcester Fire Station: Located at Great Western Business Park. Full time and retained firefighters. Includes multi-use lecture facilities.	HWFRS
Spetchley Road Ambulance Station, Worcester¹²⁸: Refurbished in 2013 to include offices, training rooms and workshops. This Hub was delivered through the “Make ready” programme and also includes full fleet facilities for the preparation of ambulances and other vehicles to respond to calls.	WMAS
Pebworth Fire Station: Assessed in the HWFRS Asset Management Strategy that the station is in good condition. The station is a base for retained firefighters only.	HWFRS
Broadway Fire Station: Assessed in the HWFRS Asset Management Strategy as being in poor condition with inadequate facilities. Retained firefighters only.	HWFRS
Pershore Fire and Ambulance Station: Assessed in the HWFRS Asset Management Strategy as being in a satisfactory condition. Retained firefighters only. Shared station for Fire and Ambulance as part of the Make Ready consolidation programme.	HWFRS / WMAS
Pershore Civic Centre – Police post based within the civic centre.	WMP
Upton-upon-Severn Fire Station: Assessed in the HWFRS Asset Management Strategy as being in good condition. Retained firefighters only.	HWFRS
Upton-upon-Severn Police Station	WMP
Malvern Fire Station: Assessed in the HWFRS Asset Management Strategy as being in good Condition. The future strategy is to retain and maintain the site. It is understood that there is an agreement in place for British Transport Police co-location.	HWFRS
Malvern Police and Ambulance Station: Shared station for Police and Ambulance as part of the Make Ready consolidation programme.	WMP

¹²⁷ <https://www.hwfire.org.uk/assets/files/hwfrs-asset-strategy-web.pdf>

¹²⁸ <https://wmas.nhs.uk/2013/07/04/make-ready-hubs-in-worcestershire/>

Infrastructure	Provider
Tenbury Wells Fire Station: Assessed in the HWFRS Asset Management Strategy as being in good Condition. The future strategy is to retain and maintain the site. Retained firefighters only.	HWFRS
Tenbury Wells Police Station	WMP
Evesham Police Station	WMP
Evesham Fire Station: The station is a designated water rescue station. Wholetime and retained firefighters.	
Evesham Ambulance Station: Community ambulance station located within Abbey Road commercial estate with one full time ambulance.	
Droitwich Police Station	WMP
Droitwich Fire Station: Shared location for two services. 15 on-call firefighters and an Urban Search and Rescue team.	HWFRS

Consultation with WMAS has identified that the three community ambulance stations in Evesham, Malvern and Pershore are all on shared sites with short-term leases and provide sufficient flexibility to respond to changes in demand for the ambulance services.

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

Planned Schemes

The HWFRS Asset Management Strategy identifies that there are three projects which are required to modernise the infrastructure of the force. This includes: relocation or redevelopment of Broadway and Pershore Fire Stations and the colocation of the British Transport Police at Malvern Fire Station. Each of these projects provides cost efficiencies and is expected to be required irrespective of the levels of growth planned at these locations.

WMAS is in the process of renewing its ambulance stock at a cost of £40m, again this is not directly linked to the growth set out in the SWDP Review. Given the recent refurbishment of the Worcester ambulance hub and the consolidation of existing stock, the WMAS has no planned schemes for its estate.

Scheme Identification based on revised Housing and Employment Needs

As set out in the 2016 SWIDP, the growth set out within the SWDP Review is likely to have a two-fold effect on emergency services. The first is the increase demands placed on services as a result of population growth and the associated number of incidents that require an emergency response. Secondly, increasingly urban areas and potentially sprawling development and potential traffic impacts will have an impact upon the serviceability of areas and an impact upon response times.

In this respect whilst infrastructure is perhaps most readily understood in terms of the provision of built facilities, there are no exclusions within the statutory framework or policy guidance relating to infrastructure, that exclude equipment, vehicle or training costs. This has been confirmed through existing case law and decisions made by the Secretary of State.

Table 55 below applies WMP standards to the growth that is proposed by the South Worcestershire Development Plan and identifies requirements for new policing infrastructure.

Table 55 Emergency Services infrastructure costs by allocation

	Number of Homes (2)	Infrastructure Requirements	Estimated Infrastructure Cost
Parkway	5,000	On-site Police post, equipment and vehicles	£656,210
Throckmorton	2,000	On-site Police post, equipment and vehicles	£269,170
Rushwick	1,000	Premises capacity expansion, equipment and vehicles	£83,694
Worcester City	1,300	Premises capacity expansion, equipment and vehicles	£156,574
Droitwich	600	Premises capacity expansion, equipment and vehicles	£77,408
Evesham	200	Premises capacity expansion, equipment and vehicles	£36,946
Malvern	700	Premises capacity expansion, equipment and vehicles	£79,166
Pershore	600	Premises capacity expansion, equipment and vehicles	£77,408
Tenbury Wells	120	Premises capacity expansion, equipment and vehicles	£35,540
Upton	120	Premises capacity expansion, equipment and vehicles	£35,540
Rural Areas (3)	2,360	Premises capacity expansion, equipment and vehicles	£308,929

The WMAS is responsive to population increase and would assess the need for additional infrastructure on a case-by-case basis. Additional community ambulance stations may be considered as part of a shared hub with other emergency services / community facilities at Worcester Parkway and Throckmorton, however further work is required to determine whether this is appropriate. The short-term leases and shared facility approach enabled through the Make Ready programme mean that the WMAS can flex to meet future demand, however consultation with the Service in September 2019 indicated that there are unlikely to be any further changes required to respond to the growth set out within the SWDP Review.

Sector-specific Funding

The emergency services are funded through a combination of central government grants and council tax revenues, with Clinical Commissioning Groups directly funding WMAS through the NHS' sustainability and transformation plan (STP) planning process.

The emergency services can 'self-fund' through an internal application process identifying a specific service/infrastructure need and justifying this through the preparation of a business case.

Like many other public-sector organisations, the emergency services have seen a significant real terms reduction in funding in recent years as a result of comprehensive spending reviews. At the same time, the demands placed upon them are increasing. However, increases in local population and the number of households do not lead to a direct increase in government funding. Whilst there might be growth through the council tax generated by an increase in its base, this funding does not meet the costs of delivering the infrastructure that is required to effectively deliver emergency services to the proposed areas of new development. Therefore, it is necessary to secure Section 106 contributions for their infrastructure, due to the direct link between the demand for emergency services and the change in the operational environment beyond their control i.e. housing growth and the subsequent and permanent impacts it has upon the emergency services.

Securing contributions means that the same level of emergency services can be provided to residents of new development as it is to existing residents and without compromising frontline services.

Conclusion

Consultation was undertaken with Place Partnership, acting on behalf of the fire and police services, and West Midlands Ambulance Service, to understand existing coverage of the South Worcestershire and changes required to respond to the growth set out in the Local Plan Review.

WMAS has enabled efficiency savings through the Make Ready programme and is expecting that it can sufficiently flex its services to meet future demands. Place Partnership has identified that there is a specific need for police infrastructure derived from benchmarks which it anticipates that planning obligations may contribute towards funding. Given the large geographies across which the services work, the locations of allocations are unlikely to affect how they provide services.

Infrastructure Assessment: Waste

14 Infrastructure Assessment: Waste

Responsibility for delivery

The Controlled Waste (England and Wales) Regulations 2012 Schedule 1 describes the types of waste to be treated as household, industrial or commercial waste. The Waste Management (England and Wales) Regulations 2006 apply to agricultural waste.

Overview of changes since the 2016 IDP

Literature, Policy and Strategy Changes

Since the publication of the 2016 IDP, there has been a notable step-change in awareness of waste at an individual level, and changes in national and international ambitions set out within the Government's 25 Year Environment Plan, the EU Circular Economy initiatives and the UN Sustainable development goals. seek to minimise raw material use and keep resources within a circular economy for as long as possible.

National Planning Policy Framework (2019): 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.

Resources and Waste Strategy for England (December 2018)¹²⁹ and

Consultations: Alongside encouraging sustainable production and enabling consumers to take more considered actions, the national strategy *Our Waste, Our Resources: A Strategy for England*, sets out initiatives to reinvigorate recycling rates across the country. WCC and the SWCs have acknowledged that the Strategy will inform future working across Worcestershire, with key elements that may impact future waste operations, subject to the outcomes of consultation, including:

Table 56 Responsibilities for Delivery

Waste Type	Responsibility
Municipal solid waste or Local Authority Collected Waste , is all household and commercial waste collected by a local authority, and some construction and demolition waste received at recycling centres.	Worcestershire County Council is the statutory Waste Disposal Authority responsible for the disposal of LACW in its area and the provision of Household Recycling Centres for residents to dispose of their Household Waste. Worcestershire County Council and Herefordshire Council have a 25 year waste PFI contract, which was signed in 1998. The individual South Worcestershire Councils are responsible for the collection of LACW.
Commercial waste is waste generated from premises used wholly or mainly for the purposes of a trade or business and does not include household, agricultural or industrial waste;	Generally managed by the private sector, with some involvement from WCC through collection at Household Recycling Centres.
Industrial waste is that which has been produced from the business sector, specifically factories and industrial plants.	Generally managed by the private sector, with some involvement from WCC through collection at Household Recycling Centres.
Hazardous Waste is waste that is harmful to human health or the environment, and which needs specialist facilities to treat.	Generally managed by the private sector, with some involvement from WCC through collection at Household Recycling Centres.
Agricultural Waste including non-natural and natural wastes.	Similar to commercial and industrial waste, this is generally managed by the private sector, either through taking waste to a licensed site, transferring this to a waste company or applying for a waste management license / or exemption. management

- Establish a consistent core set of materials to be collected by all local authorities and waste operators;
- Ensuring householders and appropriate businesses have a weekly separate food waste collection, which may require treatment and bulking facilities;

¹²⁹ Our Waste, Our Resources; A Strategy for England (December 2018)

- Potential provision of free garden waste collections which may require potential treatment and bulking facilities; and,
- Move to improve recycling performance which would require the separation of more materials at Household Recycling Centres and through kerbside collections which in turn may require changes to the Household Recycling Centres and Material Reclamation Facility needing additional site space that is not currently available.

Progress against the Worcestershire Waste Core Strategy (2012): Alongside setting out a series of policies to guide the development of waste facilities, the Strategy is focussed on achieving eight objectives, such as supporting sustainable development, enabling self-sufficiency in waste management across the County and driving waste up the waste hierarchy, with specific targets for re-use recycling and ‘other recovery’.

Although the Waste Core Strategy was adopted before the 2016 IDP was published, it identified that there was a ‘capacity gap’ for both the re-use and recycling and for ‘other recovery’ of all waste streams, which would require additional facilities to ensure that the amount of waste was appropriately managed. The Worcestershire Minerals and Waste Development Framework Annual Monitoring Report (2015-2016)¹³⁰ identifies that development of an Energy from Waste facility (EfW) (see Schemes) will make a significant contribution to the delivery of the target of 78% re-use, recycling and other recovery by 2020. No gap was identified in 2012 for sorting and transfer or disposal and landfill of waste.

The Waste Core Strategy identified that ‘all existing facilities will continue to operate at their current capacity and increased capacity will be realised through new facilities’. Intensification and reorganisation of facilities may provide some increased capacity; however, this cannot be assumed for all facilities across the county.

¹³⁰ Worcestershire Minerals and Waste Development Framework Annual Monitoring Report (2015-2016) April to December 2015

Schemes since 2016

- **EnviRecover Energy from Waste** (Hartlebury, Wychavon) Planning permission for an Energy from Waste (EfW) Plant at Hartlebury Trading Estate was granted in July 2012. Delivered through a Private Finance Initiative (PFI) Contract which runs to 2024 and secured through a Waste Contract with Mercia Waste Management, the facility became fully operational in 2017. This facility originally had planning permission to process up to 200,000 tonnes of waste per year.
- **Planning consent for increased throughput:** Planning permission was granted in March 2019 to increase the throughput of the Energy from Waste facility to uplift from 200,000 tonnes per annum to 230,000 tonnes per annum (application reference: 18/000057/CM).¹³¹

Assessment of Current Infrastructure Provision

Table 57 SWC Current Waste Infrastructure Provision

Facilities	Typical Waste stream
EnviroRecover Energy from Waste handles the majority of residual waste arising in Worcestershire, and across the boundary into Herefordshire, with any remaining capacity currently filled by commercial waste. WCC identified that this facility is operating at 100% capacity currently, but commercial waste could be displaced to accommodate household waste. Increased capacity is subject to receiving appropriate permits for additional throughput	Local Authority Collected Waste reuse, recycling and recovery.
EnviroSort Plant (Norton, Wychavon) processes recyclable waste. This plant has been operation since 2009, and sorts the recyclable waste before this is sent to private sector companies for processing. The site currently has capacity of 105,000 tonnes and currently utilises approximately 78,000 tonnes ¹³² .	
Hill and Moor Landfill , which is operated under the same Mercia Waste Management PFI, handling waste which cannot be burnt within the EfW, recycled or recovered.	Residual Waste:

¹³¹ Worcestershire County Council Planning Reference (18/000057/CM)
¹³² WCC (2019) Emerging Growth and Infrastructure Strategy

Facilities	Typical Waste stream
Household Waste Recycling Centres (HWRCs) in South Worcestershire, including at ¹³³ : - Hill and Moor (Persore, Wychavon), - Upton-upon-Severn (Upton, Malvern Hills); - Malvern HRC, which is nearing capacity; - Hallow Road, West Worcester (Worcester), - Bilford Road, East Worcester (Worcester) which is nearing capacity; - Droitwich, Worcestershire (Wychavon)	Household Waste , which are available for residents to use.

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

Strategic Demand

Housing and employment growth across Worcestershire will create additional waste, both domestic and commercial. To inform the Waste Core Strategy (2012), specific assumptions for Waste Arising Projections were determined. For residential development, it is expected that for every 1,000 new homes built there will be an estimated additional:

- 580 tonnes residual (black bin waste);
- 220 tonnes recyclable (green bin waste); and,
- 9,540 trips to Household Recycling Centres per annum.

Worcestershire County Council have undertaken an assessment of waste infrastructure against planned growth across the whole county area, including growth planned within the SWDP adopted plan and proposed 14,000 units within the plan review:

- **EfW:** If the application for additional capacity at the Hartlebury EfW plant is successful and the current waste mix is maintained, the assessment has identified that the site should be able to provide capacity to manage the county-level forecast increase in Local Authority Collected Waste to 2040.
- **Envirosort Plant:** It is expected that this plant can handle growth in in Local Authority Collected Waste to 2040.
- **Commercial, industrial, construction, demolition and hazardous waste:** This waste will continue to be managed by the private sector. Estimations in waste arisings are subject to the type of employment growth and specific business types. Whilst WCC estimate that the existing 70 privately-owned, specialised waste management facilities will be able to accommodate planned growth, with continual development of innovative waste management, it may be that new facilities are required.

Schemes and Spatial Demand

Outcomes of the Government Consultation on the Resources and Waste Strategy:

Consultation took place until mid-May 2019, with central government now considering responses. This may result in demand for treatment and bulking facilities for garden waste and food waste, EfW efficiency and additional material separation at HWRCs and the kerbside.

Lifetime of the EfW and Plan Period: The EfW at Hartlebury has an estimated total life span of around 25 years (up to 2042), and it is identified within the emerging Growth and Infrastructure Strategy (2019) that this facility will likely need a significant refit following this point.

Capacity at Malvern and Worcester East HWRC: Whilst there are no prescribed catchment areas for HWRC facilities, given these are at or nearing capacity, growth in these areas will continue to place demand on these facilities. WCC will continue to explore options for expanding capacity, creating

¹³³ Worcestershire County Council mapping of sites:
<http://gis.worcestershire.gov.uk/WccGISOnline/Maps.aspx?xmin=322114.5605791212&ymin=228864.28981457965&xmax=424270.3898907798&ymax=279942.20447040896&l=37.66#top>

additional capacity or implementing soft interventions (such as encouraging people to use sites at different times).

Sector-specific Funding

Worcestershire County Council Cabinet are currently reviewing the possibility of extending the duration of the Waste Management Service Contract (WMSC) with Mercia Waste Management Limited (Mercia) for a period of 5 years¹³⁴. This contract covers the operation and management of facilities within the SWC area identified above.

The SWC Developer Contributions SPD (July 2018) indicates that contributions could be collected for waste management so long as this was in accordance with NPPF test for planning obligations and CIL regulations. Waste Management is currently not identified on the Regulation 123 list which would enable CIL to be levied against this infrastructure type.

Other sources of funding, albeit currently limited in supply, may include grants from government sources, such as Defra, or Waste and Resources Action Programme (WRAP) grants. Whilst not specifically targeted at physical infrastructure, resource efficient technologies and innovation could be eligible for Industrial Strategy Challenge Fund or Innovate UK funding.

Summary and Conclusions from Consultation with WCC

WCC consider that the county appears to have sufficient capacity to manage Local Authority Collected Waste to 2040, however this will depend on the outcomes of the Government Strategy Consultations. Commercial, industrial, construction, demolition and hazardous waste will continue to be managed by the private sector.

Monitoring of changes to planned growth across the County area, the impacts of the Government Strategy Consultations and the operational health of existing

facilities will be necessary to ensure sufficient time to plan for capacity going forward and beyond 2040.

¹³⁴ Worcester County Council Cabinet 13 December 2018 Waste Contract:
<http://worcestershires.moderngov.co.uk/ieListDocuments.aspx?CId=131&MId=2163&Ver=4>

Infrastructure Strategy

15 Infrastructure Strategy

Overview

The South Worcestershire Development Plan Review sets out an uplift in growth, beyond the levels within the 2016 adopted Plan. Alongside providing an update to the SWIDP, which has informed the South Worcestershire Development Plan, the purpose of the IDP Review is therefore to understand the implications of the increased levels of growth proposed across the three councils.

The IDP Review does not form the end of the process. Indeed, as allocations and the overall distribution of growth becomes clearer, the IDP will require additional refinement and further discussions with statutory providers to understand the infrastructure response to proposed growth.

Summary

Since the preparation of the 2016 Infrastructure Delivery Plan, significant progress has been made in relation to identifying and collating **transport** schemes across the South Worcestershire area through the Local Transport Plan 4 and the Rail Investment Strategy. In addition, WCC have identified that progress has been identified against these schemes, which has been detailed in Appendix A1. However, further investigation is needed through the next stages of plan-making in relation to the proposed levels of growth, with initial concerns raised by both Highways England and by Network Rail. In combination with the outcomes of the Transport Study which has been commissioned to inform the Plan, the infrastructure response to this growth will need to be developed as the Plan progresses.

In relation to **utilities**, there are likely capacity constraints identified at Pershore and Malvern for electricity and Worcester, Malvern, Pershore, Droitwich, Upton, Rushwick, Throckmorton and Worcester Parkway for Wastewater. Whilst behavioural changes and a shift towards renewable energy may reduce

overall demand, policy choices (such as increasing electrical vehicle changing points) may place increasing pressure on the network.

In relation to **flood risk**, a Strategic Flood Risk Assessment and Water Cycle Study has been prepared to inform the South Worcestershire Development Plan Review. The SFRA assigns ‘risk ratings’ to each of the catchments in South Worcestershire and establishes different requirements for each catchment: Worcestershire Parkway and Evesham are identified as falling within the High-Risk Catchment area. Further consultation will be necessary with the Environment Agency following the Local Plan consultation to confirm the acceptability and infrastructure response for specific sites.

In relation to **telecoms**, broadband coverage is generally good following the Superfast Broadband roll-out. Discussions with both Worcestershire County Council and WLEP considered that, whilst continuing to look at opportunities, there were currently no publicly funded large-scale additional expansion programmes currently secured (beyond the completion of the Superfast Broadband Phase 3 including ‘Defra’ supported extension and schemes listed in Appendix A2). Mobile service coverage depends upon each providers infrastructure.

Capacity at existing **schools and academies** varies significantly throughout South Worcestershire, and whilst a number of new / expanded schools have been delivered, schools within most of the main towns within the area are nearing capacity. In terms of the overall strategy for new growth, consultation with Worcestershire County Council has indicated that there is an expectation that the proposed strategic allocations should be ‘self-contained’, with future education provision secured onsite either via developer delivery or funded through the methods within the funding section of this chapter. Expansions to existing schools are expected where there are smaller or more dispersed developments.

In terms of **health care provision**, it is advised that continued dialogue between AHT, HCT and the South Worcestershire Councils is required throughout the plan-making and development management processes to understand the impact of population growth and Local Plan growth on future provision. In relation to

primary care, a large proportion of the GP surgeries within the three districts are assessed by the CCG and the CQC as either approaching, being at or over capacity. There is an expectation that new GP surgeries would be provided at Worcestershire Parkway and Throckmorton Airfield, with improvements to existing surgeries likely to be required at Rushwick.

There is generally good coverage of **community facilities** across South Worcestershire, however these vary significantly in terms of quality. Future improvements or additional facilities relating to housing growth should be provided in accordance with standards set out in the report. The future of library provision will be subject to the long-term vision detailed within the Library Strategy, and the future of culture heritage will be in part subject to the outcomes of the scoping project to establish the benefits and costs of rationalising the existing collections.

The Playing Pitch Strategy (July 2015) and the 2016 Sports Facilities Study provide a detailed assessment of the quantity and quality of **existing sports and recreational facilities**. This highlighted that there was generally a lack of capacity for football and hockey in South Worcestershire, however there was some capacity for cricket and rugby. Demand for indoor facilities and swimming pools has increased over the last five years and new facilities have been delivered including Perdiswell Leisure Centre and the expansion of Evesham and Droitwich Leisure Centre. There is an expectation that sport and recreational facilities will be provided onsite to meet demands on Strategic Allocations, whilst for the main settlements there is a need to improve and/or expand existing sports facilities to cope with increased demand.

Green Infrastructure within South Worcestershire is generally of high quality, with a general approach for protection and enhancement. Small areas sporadically distributed across the three districts are assessed as requiring restoration. The Developer Contributions SPD 2018 sets out clear space and cost requirements for a variety of different open spaces for new development.

Consultation was undertaken with Place Partnership, acting on behalf of the fire and police services, and West Midlands Ambulance Service, to understand existing coverage of **emergency services** within South Worcestershire and changes required to respond to the growth set out in the Local Plan Review.

WMAS has enabled efficiency savings through the Make Ready programme and is expecting that it can sufficiently flex its services to meet future demands. Place Partnership has identified that there is a specific need for police infrastructure derived from benchmarks which it anticipates that planning obligations may contribute towards funding.

WCC consider that the county appears to have sufficient capacity to manage Local Authority Collected **Waste** to 2040, however this will depend on the outcomes of the Government Strategy Consultations. Commercial, industrial, construction, demolition and hazardous waste will continue to be managed by the private sector. Monitoring of changes to planned growth across the County area, the impacts of the Government Strategy Consultations and the operational health of existing facilities will be necessary to ensure sufficient time to plan for capacity going forward and beyond 2040.

Next Steps

It is important that the infrastructure required to support the planned growth within the South Worcestershire Councils area is delivered in a manner that supports the development of sustainable communities. Key principles and recommendations in planning for the delivery of infrastructure are set out below:

- **Monitor progress of infrastructure provision on sites identified within the Adopted SWC IDP:** The adopted Plan and 2016 IDP sets out the infrastructure requirements for growth of 28,400 housing units and 280ha of employment land across the area. The Development Plan Review includes for the provision of a further 14,000 homes and 51 hectares of employment land up to 2041. To ensure the IDP remains current and up-to-date, it will be important to monitor the provision of infrastructure against the requirements within the Local Plan Review.
- **Identify alternative sources of funding:** The infrastructure identified within the IDP Review is estimated to cost hundreds of millions of pounds. The levels of growth proposed are unlikely to be sufficient to require new 'big ticket' items of infrastructure alone, therefore it may be necessary to identify alternative

sources of funding. Each individual chapter sets out alternative sources of funding, which could provide additional input to deliver essential infrastructure.

- **Prioritisation of schemes:** Given the overall cost associated with scheme, it will be important to consider in the next iteration of the IDP whether projects are required if growth is to be achieved in a timely and sustainable manner or if these projects are likely to be desirable and unlikely to prevent growth if not delivered. This will allow prioritisation of delivery and enable focused negotiations for s.106 agreements and when considering CIL expenditure.
- **Note changes to the Community Infrastructure Levy:** Iterations of the IDP should note the Community Infrastructure Levy (Amendment) (England) Regulations 2019. These were made in Parliament on 9 July 2019 and came into force on 1 September 2019. The most relevant changes are as follows:
 - Councils will be obliged to replace their Regulation 123 lists with new Infrastructure Funding Statements.
 - Abolition of Regulation 123. This will mean that more than five Section 106 payments can be used together to fund a single infrastructure project.
 - The abolition of Regulation 123 means that Section 106 and CIL can be used to together the fund the same infrastructure project.
- **Undertake future updates:** The IDP Review does not form the end of the process. Indeed, as allocations and the overall distribution of growth become clearer, the IDP will require additional refinement and further discussions with statutory providers to understand the infrastructure response to proposed growth.

Appendices

Appendix A Infrastructure Schedule

A1 Transport Project Schedules

Table 58 Strategic Planned Schemes (from LTP4 and Worcestershire Rail Investment Strategy 2017)

Mode focus	Scheme	2019 Update	Source (and relevant ref)	Detail ¹³⁵	Lead and Delivery Partners	Cost	Delivery Phasing / Forecast Completion	Funding ¹³⁶	Gaps in Funding
Rail	Worcestershire Parkway, Major Scheme, Wychavon	On-site, with construction programmed for completion by close 2019 ¹³⁷	Local Transport Plan 4 (2018) (SWST1) Shaping Worcestershire's Future (2017 - 2022)	Development of a new parkway station at the intersection of the Bristol to Birmingham and the Worcester - London (Cotswold Line) main line railways. Highway improvements and car-parking will be delivered for all modes to support the Worcestershire Parkway Scheme to enable access.	WCC (land-side), Network Rail (Track Side)	£29 million	December 2019	Prudential borrowing/ Local Growth Deal Funding / LTP funding	N/A
Multi-modal	Worcester City Centre Transport Strategy	Discussions with WCC identified that delivery is reliant on delivery of Worcester City Centre Masterplan. Infrastructure improvements identified as a current priority ¹³⁸	Local Transport Plan 4 (SWST2)	Development of a detailed transport investment strategy to tackle access issues, explore options to improve and disperse traffic flow to increase efficiency and reduce air quality issues.	WCC/ Worcester CC/ Developers/ LEP	£50 million	2019-2024	Worcester City Council/ LTP / WCC /Developers	Unknown
Rail	Shrub Hill Station Enhancement Scheme, Worcester	No update.	Local Transport Plan 4 (2018) (SWST3) Rail Investment Strategy (2017) (WOS1)	Scheme to improve accessibility and attractiveness to business and visitors and increase the role of the stage as a major transport interchange.	WCC / LEPs / DfT	£6 million £15 million	Phase 1 2020 Phase 2 2025 Phase 3	Developers / The Rail Industry / Major Scheme (DfT) / Worcester City Council	Unknown

¹³⁵ Unless otherwise stated, Local Transport Plan 4 (2017-2022)

¹³⁶ Unless otherwise stated, Local Transport Plan 4 (2017-2022)

¹³⁷ http://www.worcestershire.gov.uk/news/article/1688/worcestershire_parkway_rail_station

¹³⁸ <https://www.worcester.gov.uk/documents/10499/9700077/MASTERPLAN+DOCUMENT+REV10+PART+2.pdf/c260cb44-e2a1-6e8a-60de-71ef6a533049>

Mode focus	Scheme	2019 Update	Source (and relevant ref)	Detail ¹³⁵	Lead and Delivery Partners	Cost	Delivery Phasing / Forecast Completion	Funding ¹³⁶	Gaps in Funding
							2030 WOS1 planned for CP5 / CP6 (2019-2024)		
Highways	M5 Junction 6 - Major Capacity Enhancement Scheme	Commenced in April 2018, with expected end date in Autumn 2019.	Local Transport Plan 4 (2018) (SWST4)	Improvement work to increase capacity of the junction by widening the roundabout, the slip roads and all approaches	Highways England	£2 million ¹³⁹	Autumn 2019	DfT / Highways England	N/A
Highways	A4440 Worcester Southern Link Road (Phase 4) Improvements	In progress ¹⁴⁰	Local Transport Plan 4 (2018) (SWST5) Shaping Worcestershire's Future (2017 - 2022)	he A4440 Worcester Southern Link Road Improvements Phase 4 includes an offline widening of the existing SLR 1.2 mile carriageway from Ketch Roundabout to Powick Roundabout to provide a dual carriageway. The scheme also includes two new bridge structures, at Carrington Bridge and at Powick Common viaduct. The sustainable transport measures include widening of the existing footway to 2.0 m wide shared pedestrian/cycle route on northern side; provision of a foot/cycle bridge linking the north and south cycle routes at Powick Roundabout, located on the west approach; and upgrade of the grade separated pedestrian route at Ketch Roundabout for north to south movements	WCC	£72 million	2021/22	LTP / DfT / Developers / Growth Deal Funding	N/A
Highways	Pershore Northern Access Improvements	Fully designed with planning approved, however noted funding shortfall ¹⁴¹ .	Local Transport Plan 4 (2018) (SWST6)	The scheme comprises: Pershore Northern Link: A new single carriageway road link, providing a critical connection between the A44 and B4083 Wyre	WCC	£11.6 million	2020 ¹⁴²	LTP / Developer / Growth Deal ¹⁴³	£1 million ¹⁴⁴

¹³⁹ Information provided by WCC.¹⁴⁰ http://www.worcestershire.gov.uk/news/article/1687/the_a4440_worcester_southern_link_road_improvements¹⁴¹ http://www.worcestershire.gov.uk/news/article/1761/pershore_infrastructure_improvement_scheme_latest_updates¹⁴² <http://worcestershire.moderngov.co.uk/documents/s19913/pr2019-03-26%20Pinvin%20Junction.pdf> (Planning Reference: 18/000060/REG3)¹⁴³ <https://www.wlep.co.uk/17-5-million-cash-boost-worcestershire-help-create-local-jobs-growth/>¹⁴⁴ Discussions with WCC

Mode focus	Scheme	2019 Update	Source (and relevant ref)	Detail ¹³⁵	Lead and Delivery Partners	Cost	Delivery Phasing / Forecast Completion	Funding ¹³⁶	Gaps in Funding
				Road, providing a significantly enhanced connection between the A44 and Pershore Town Centre; A44/A4104/B4082 Pinvin Crossroad Enhancements. The scheme will provide a new north-south route between the A44 and Pershore town centre and enable greater priority to be given to the A44 at Pinvin Crossroads					
Highways	Evesham - A46 Corridor Major Upgrade Scheme	Work undertaken on Pre-Feasibility Option testing in 2018 ¹⁴⁵ .	Local Transport Plan 4 (2018) (SWST7) Midlands Connect ¹⁴⁶	Upgrade of the route to 'expressway' standard (dual carriageway with limited exits) to enhance accessibility, safety and resilience of the highways network in the Vale of Evesham.	WCC and Wychavon, Highways England	£300 million	2030 ¹⁴⁷	Highways England /Department for Transport / Developers	Unknown
Rail	Honeybourne Rail Station Improvement Scheme	Capacity of car-park assessment being undertaken ¹⁴⁸	Local Transport Plan 4 (2018) (SWST8)	Enhancements to station facilities, including enhanced parking capacity, strategic access and safety improvements on highway routes to/from Honeybourne Station and the surrounding area, for all modes of transport. This scheme is subject to funding being secured for North Cotswold Line.	Predominantly Warwickshire County Council	£3 million	2022	Subject to funding being secured for North Cotswold Line (Network Rail) GWR/ Wychavon/Worcs CC/Developers (Warks CC)	Unknown
Rail	Droitwich to Stoke Works Junction- Rail Line Redoubling	N/A	Local Transport Plan 4 (2018) (SWST9) Rail Investment Strategy (2017) (WAB3)	Scheme to reinstate dual track between Stoke Works (Bromsgrove) and Droitwich Spa, to increase capacity on this route and increase flexibility at Shrub Hill.	NR (funded by WMR/ DfT/WCC)	£15 million	2030 WAB3 planned for CP6 (2019-2024)	Network Rail	Unknown

¹⁴⁵ http://www.worcestershire.gov.uk/info/20629/evesham_transport_strategy/1820/evesham_transport_strategy

¹⁴⁶ <https://www.midlandsconnect.uk/news-and-events/midlands-connect-reveals-20-year-improvement-plan-for-the-a46/>

¹⁴⁷ Discussions with WCC

¹⁴⁸ Discussions with WCC

Mode focus	Scheme	2019 Update	Source (and relevant ref)	Detail ¹³⁵	Lead and Delivery Partners	Cost	Delivery Phasing / Forecast Completion	Funding ¹³⁶	Gaps in Funding
Rail	Rushwick (Worcester West) Station Scheme	Business Case Development	Local Transport Plan 4 (2018) (SWST10)	Conceptual scheme which could involve the development of a new station in the vicinity of Rushwick, close to the A4440	WCC	£12 million	2026	LTP / The Rail Industry / Developers	Unknown
Rail	Worcester Rail Triangle Major Re-signalling and Reconfiguration	N/A	Local Transport Plan 4 (2018) (SWST11) Rail Investment Strategy (2017) (WAB3)	Critical scheme involves the complete re-signalling and reconfiguration of rail infrastructure in Worcester City, which currently creates and unnecessary capacity constraint.	NCLTE/DfT	£10 million	2023 WAB3 planned for CP6 (2019-2024)	Network Rail	Unknown
Road	Worcester - Western Link Road Scheme	N/A	Local Transport Plan 4 (2018) (SWST12)	Development of a new link road to connect the A4440 (Southern Link Road) with the B4204 Martley Road	WCC	£40 million	Beyond 2030 ¹⁴⁹	LTP / Local Growth Fund / Developers	Unknown
All	South Worcestershire Transport Telematics Investment Package	N/A	Local Transport Plan 4 (2018) (SWST13)	Comprehensive programme of investment in transport telematics, including Variable Message Signs, Real Time Information System displays, Traffic Signalling Improvements and Traffic Monitoring and Information Dissemination Devices to improve access to journey information and enhance the efficiency	WCC / Developers	£1 million	2018-2030	Funding bids/ Developers	Unknown
Road	Black Bridges, Torton (A449 / A450 / A442) Junctions	Major Road scheme in Network Modelling ¹⁵⁰	Local Transport Plan 4 (2018) (SWST14)	Comprehensive review of these junctions in terms of capacity, traffic flows, design and signalling apparatus (where provided) for all suitable transport modes, to identify whether capacity and/or safety improvements are required	WCC/MRN/ Developers	3 options being explored (costs: £584,000-£1,698,000) ¹⁵¹ , however cost could extend to the region of £12 million depending on the option chosen ¹⁵² .	2030	Developer / LTP	Unknown
Road	Bluebell Farm (A4103 / A38) Junction	Scheme to include signalisation of Junction ¹⁵³	Local Transport Plan 4 (2018) (SWST15)		WCC/MRN	£300,000	2024	Developer / LTP	Unknown

¹⁴⁹ Discussions with WCC¹⁵⁰ <https://www.wyreforestdc.gov.uk/media/4583174/A450-Corridor-Enhancement-Report-June-2019-.pdf>¹⁵¹ <https://www.wyreforestdc.gov.uk/media/4583174/A450-Corridor-Enhancement-Report-June-2019-.pdf>¹⁵² Discussions with WCC¹⁵³ Discussions with WCC

Mode focus	Scheme	2019 Update	Source (and relevant ref)	Detail ¹³⁵	Lead and Delivery Partners	Cost	Delivery Phasing / Forecast Completion	Funding ¹³⁶	Gaps in Funding
Road	Martin Hussingtree - A38 Droitwich Road / A4538 Pershore Lane Junction	Partly delivered ¹⁵⁴	Local Transport Plan 4 (2018) (SWST16)		WCC/MRN	£300,000	2029	Developer / LTP	Unknown
Road	Holt Heath Junctions (A443 / A4133)	N/A	Local Transport Plan 4 (2018) (SWST17)		WCC/ Developers	£300,000	2026	Developer / LTP	Unknown
Road	The Rhydd (B4211 Guarlford Road / B4211 Upton Road / B4424 Powick Road) Junction	N/A	Local Transport Plan 4 (2018) (SWST18)		WCC/ Developers	£300,000	2026	Developer / LTP	Unknown
Road	Welland - B4208 Gloucester Road/ B4208 Blackmore Park Road / Upper Hook Road Junction	N/A	Local Transport Plan 4 (2018) (SWST20)		WCC/ Developers	£100,000	2028	Developer / LTP	Unknown
Road	Leigh Sinton - A4103 / B4503 Malvern Road Junction	N/A	Local Transport Plan 4 (2018) (SWST21)	Comprehensive review of these junctions in terms of capacity, traffic flows, design and signalling apparatus (where provided) to identify whether capacity and/or safety improvements are required	WCC/ Developers	£270,000	Pre-2022 ¹⁵⁵	Developer / LTP	Unknown
Rail	Redoubling of the North Cotswold Line Major Scheme ¹⁵⁶	Discussions with Network Rail highlighted that a business case had been developed, but funding would be some way off.	Local Transport Plan 4 (2018) (SWST23) Rail Investment Strategy (2017) (NCL3, ELC1)	Joint engagement with the rail industry, Herefordshire, Gloucestershire and Oxfordshire to develop an integrated 'economic case' for North Cotswold Line improvements to provide additional Infrastructure capacity.	NCLTF / DfT	£40 million	2030 NCL3 planned for CP6 (2019-2024) ELC1 planned for	Network Rail and SLC rail	Unknown

¹⁵⁴ Discussions with WCC¹⁵⁵ Discussions with WCC¹⁵⁶ <https://cdn.networkrail.co.uk/wp-content/uploads/2017/06/Railway-Upgrade-Plan-Update-2017-Western.pdf> -

Mode focus	Scheme	2019 Update	Source (and relevant ref)	Detail ¹³⁵	Lead and Delivery Partners	Cost	Delivery Phasing / Forecast Completion	Funding ¹³⁶	Gaps in Funding
							CP6 / CP7 (2019-2029)		
Rail	Hartlebury Rail Station Enhancement Major Scheme	N/A	Local Transport Plan 4 (2018) (SWST24) Rail Investment Strategy (2017) (ACS1)	Station enhancements could include: - Improvements to passenger information and station facilities for passengers - Facilities that will cater for current and future demand growth; - Improvements to walking /cycling routes to the station; - Improvements to access arrangements for cyclists and provide additional new cycle storage facilities; - Set-down and pick-up facilities for taxi users & operators; - Improve facilities for passengers with disabilities or who experience difficulty using the railway station facilities; - Improvements to car parking; - Working with Train Operating Companies to improve services.	Worcs CC/ WMR/ DfT/ Wychavon/ developer	£30 million	2025 ACS1 planned for CP5 / CP6 (2019-2024)	DfT / Developer / LTP Funding	Unknown
All	Rural Traffic Management Programme	N/A	Local Transport Plan 4 (2018) (SWST25)	A programme of traffic management schemes that suit local needs and serve wider, strategic purposes.	WCC	Unknown	2017-2030	LTP/DfT/ Developers	Unknown
All	Travel Choice Support Programme	N/A	Local Transport Plan 4 (2018) (SWST26)	A programme of measures that would include bicycle hire, bikeability training, travel training, travel planning, 'Smarter Choices' schemes and other supporting measures.	WCC / Developers	Unknown	2017-2030	Public Health Directorate/ DfT/ Developers/LTP	Unknown
All	Responding to the proposed levels of growth within the SWDP 2019	To be updated 2020.	Unknown at this stage of the Plan.	Responding to the concerns raised in relation to the levels of growth in the SWDP 2019.	Unknown at this stage of the Plan.	Unknown at this stage of the Plan.	Unknown at this stage of the Plan.	Unknown at this stage of the Plan.	Unknown at this stage of the Plan.

Table 59 Strategic Active travel corridor schemes for South Worcestershire (from LTP4 2018 -2030 and Worcestershire Rail Investment Strategy 2017)

Mode focus	Scheme Name	2019 Update	Source (and relevant ref)	Detail	Lead and Delivery Partner	Costs	Delivery Phasing / Forecast Completion	Potential Funding Sources	Gaps in Funding
Active travel	Worcester to Malvern Wells (NCN41) Active Travel Corridor	No Update	Local Transport Plan 4 (2018) (SWAT1)	An 'Active Travel Corridor' is investment in walking and cycling links along the corridor to create a safe, comprehensive, integrated network linking residential areas with key trip attractors, including schools, rail stations, town centres and employment locations. This will include surfacing, signage, lighting and public realm improvements to create an attractive and coherent network. Secure cycle parking and sheltered secure cycle parking will be considered.	WCC	£1.7 million	2028	LTP/Developer	Unknown
Active travel	Worcester to Droitwich Spa Active Travel Corridor	No Update	Local Transport Plan 4 (2018) (SWAT2)		WCC/ MRN	£1.5 million	2027		Unknown
Active travel	Worcester to Kempsey Active Travel Corridor	No Update	Local Transport Plan 4 (2018) (SWAT3)		WCC	£1 million	2026		Unknown
Active travel	Worcester to Hallow Active Travel Corridor, including possible extension to Top Barn Farm/ Lakeside Campus, to be developed in partnership with the University of Worcester	No Update	Local Transport Plan 4 (2018) (SWAT4)		WCC / Uni of Worcs	£1.5 million	2030		Unknown
Active travel	Vale West Active Travel Corridor (Persore-Wyre Piddle-Fladbury-Charlton/Cropthorne-Evesham)	No Update	Local Transport Plan 4 (2018) (SWAT5)		WCC/ Wychavon/ developer	£3 million	2024		Unknown
Active travel	Vale East Active Travel Corridor Development and Improvements (Evesham-Badsey-Offenham-Littletons-Harvington-Wickhamford-Childswickham-Broadway - Bretforton/Honeybourne (potential for Stratford Greenway))	No Update	Local Transport Plan 4 (2018) (SWAT6)		WCC/ Wychavon/ developer	£7 million	2024		Unknown
Active travel	Malvern to Upton-upon-Severn Active Travel Corridor Phase 1 (Malvern to Three Counties Showground)	No Update	Local Transport Plan 4 (2018) (SWAT7)		WCC	£200,000	2021		Unknown

Mode focus	Scheme Name	2019 Update	Source (and relevant ref)	Detail	Lead and Delivery Partner	Costs	Delivery Phasing / Forecast Completion	Potential Funding Sources	Gaps in Funding
Active travel	Malvern to Upton-upon-Severn Active Travel Corridor Phase 2 (Three Counties Showground to Upton-upon-Severn)	No Update	Local Transport Plan 4 (2018) (SWAT8)		WCC	£1.5million	2026		Unknown
Active travel	Malvern to Leigh Sinton Active Travel Corridor	No Update	Local Transport Plan 4 (2018) (SWAT9)		WCC / Developers	£750,000	2022		Unknown
Active travel	Stourport to Hartlebury Station (Leapgate Line) Active Travel Corridor	No Update	Local Transport Plan 4 (2018) (SWAT10)		WCC	£6 million	2026		Unknown
Active travel	Pershore to Pinvin Active Travel Corridor (including access to Pershore Station to allow safe passage for walkers and cyclists)	No Update	Local Transport Plan 4 (2018) (SWAT11)		WCC/ Wychavon/ developer	£200,000	2023		Unknown
Active travel	Worcester North East- North West Active Travel Corridor (Lower Broadheath to Worcester Six, via new river bridge)	No Update	Local Transport Plan 4 (2018) (SWAT12)		WCC	£12 million	2028		Unknown
Active travel	Worcester River Severn Active Travel Corridor (Sabrina Bridge to Kepax)	No Update	Local Transport Plan 4 (2018) (SWAT13)		WCC	£2 million	2030		Unknown
Active travel	Worcester - Canal Towpath Active Travel Corridor Improvement Scheme (Diglis to Tibberton)	Pending guidance from Highways England	Local Transport Plan 4 (2018) (SWAT14)		WCC	£600,000	2021		Unknown
Active travel	Worcester-Parkway-Pershore Active Travel Corridor, including possible links to Stoulton and Drakes Broughton	No Update	Local Transport Plan 4 (2018) (SWAT15)		WCC	£600,000	Feasibility Underway		N/A

Table 60 Droitwich Schemes (from LTP4 2018 -2030 and Worcestershire Rail Investment Strategy 2017)

Mode Focus	Scheme Name	2019 Update	Source (and relevant ref)	Detail	Lead and Delivery Partner	Costs	Delivery Phasing / Forecast Completion	Potential Funding Sources	Gaps in Funding
Road	Westlands - A38 Roman Way / A442 Kidderminster Road Junction – Active Travel Access	No Update	Local Transport Plan 4 (2018) (D3)	Comprehensive review of junctions in terms of capacity, traffic flows, design and signalling apparatus (where provided) to identify whether capacity and/or safety improvements are required. If so, this will be followed by a detailed design process to identify a costed improvement scheme.	WCC	£60,000	Scheme in progress.	No	Non
Road	A38 Roman Way / B4090 Worcester Road Junction	No Update	Local Transport Plan 4 (2018) (D4)		Developers	Scheme delivered	2019	Developers	No
Active Travel	Active Travel Network Investment Programme	No Update	Local Transport Plan 4 (2018) (D6)	Active Travel Investment Programme is investment in walking and cycling links across the Droitwich area to create a safe, comprehensive, integrated network linking residential areas with key trip attractors, including schools, rail stations, town centres and employment locations. This would also include a review of subways to identify cosmetic improvements. Access issues at Westlands are well known, and this scheme will look to invest in active travel links to help address these.	WCC	£1 million	2023	Developer/LTP	N/A
Rail	Rail Station Improvement Scheme	N/A	Local Transport Plan 4 (2018) (D7)	Provision of improved waiting facilities for passengers, secure parking facilities for motorcycles/ cycles, improved pick up and drop off facilities (cars, taxis and community transport) and accessibility enhancements to walking and cycling links between the station, the town centre and the residential catchment area.	WCC/ Developers	£5 million	2026	Network Rail / LTP / Developers	Unknown
Parking	Parking Strategy (To include parking for cars, motorcycles and covered parking for bicycles)	No Update	Local Transport Plan 4 (2018) (D8)	Comprehensive multimodal review of network efficiency and infrastructure.	WCC/ Wychavon DC	£20,000	2024	LTP / Developers	Unknown

Table 61 Vale of Evesham Package (from LTP4 2018 -2030 and Worcestershire Rail Investment Strategy 2017)

Mode focus	Scheme Name	2019 Update	Source (and relevant ref)	Detail	Lead and Delivery Partner	Costs	Delivery Phasing / Forecast Completion	Potential Funding Sources	Gaps in Funding
Rail	Evesham Rail Station Improvement Scheme	Network Rail considering options for increasing car-parking.	Local Transport Plan 4 (2018) (E1)	Provision of improved waiting facilities for passengers, secure parking facilities for motorcycles/ cycles, improved pick up and drop off facilities (cars, taxis and community transport) and accessibility enhancements to walk and cycle links between the station, the town centre and the residential catchment area.	GWR/ Network Rail/ SLC	£100,000	2026 onwards	Network Rail / /LTP/ Developers	Unknown
All	Evesham Transport Strategy	N/A	Local Transport Plan 4 (2018) (E2, E5, E6, E8)	Package of enhancements to transport infrastructure and services to support improvements to the transport network and public realm, and disperse traffic flow, within the town. This would also include a plan to improve parking for cars, motorcycles and covered parking for bicycles, and a comprehensive multimodal review of network efficiency and infrastructure.	WCC	£7 million	2023	Maintenance/LTP/ Developers/Wychavon District Council/Major Scheme (DfT)	Unknown
All	Port Street Key Corridor of Improvement (including public realm and Waterside junction improvements)	N/A	Local Transport Plan 4 (2018) (E3)	Upgrading this busy junction to improve its efficiency capacity for all suitable transport modes. This would also include public realm measures to improve the Broadway Road/Elm Road Junction.	WCC / Developers	£400,000	2023	Developers / Maintenance / Future High Streets Funding	Unknown
Active travel	Active Travel Network Investment Programme	N/A	Local Transport Plan 4 (2018) (E4)	Active Travel Investment Programme is investment in walking and cycling links across Evesham to create a safe, comprehensive, integrated network linking residential areas with key trip attractors, including schools, rail stations, town centres and employment locations. This will include surfacing, signage, lighting and public realm improvements to create an attractive and coherent network.	WCC	£7.5 million	2023	LTP / Developers	Unknown
Road	Vine Street / High Street / Bridge Street Junction	Depending on outcomes of Evesham Transport Strategy	Local Transport Plan 4 (2018) (E7)	A comprehensive review of these junctions in terms of capacity, traffic flows, design and signalling apparatus (where provided) for all suitable transport modes, to identify whether capacity and/or safety improvements are required. If so, this will be followed by a detailed design process to identify a costed improvement scheme to tackle identified issues and constraints.	WCC / Developers	£20,000	2020	Developers/LTP/ Maintenance	Unknown

Mode focus	Scheme Name	2019 Update	Source (and relevant ref)	Detail	Lead and Delivery Partner	Costs	Delivery Phasing / Forecast Completion	Potential Funding Sources	Gaps in Funding
Road	Parking Strategy (To include parking for cars, motorcycles and covered parking for bicycles)	N/A	Local Transport Plan 4 (2018) (E9)	Comprehensive multimodal study to review of network efficiency and infrastructure. This study would identify where to focus investment to improve the operation of the local transport network.	WCC/ Wychavon DC	£20,000	2019	LTP/Developers	Unknown
Road	Broadway - Visitor Access Improvement	N/A	Local Transport Plan 4 (2018) (B1)	Scheme to manage on-street parking in the historic, protected village centre.	Worcs CC/ Wychavon DC	£20,000	2019	LTP/Developers	Unknown

Table 62 Malvern Package (from LTP4 2018 -2030 and Worcestershire Rail Investment Strategy 2017)

Mode focus	Scheme Name	2019 Update	Source (and relevant ref)	Detail	Lead and Delivery Partner	Costs	Delivery Phasing / Forecast Completion	Potential Funding Sources	Gaps in Funding
All	Great Malvern Town Centre Regeneration Scheme	Currently paused ¹⁵⁷	Local Transport Plan 4 (2018) (M1)	A package of Public Realm Enhancements in Great Malvern Town Centre.	WCC	£50,000	2019	LTP / WCC / Malvern Hills District Council	Unknown
Road and Active Travel	Parking Strategy (To include parking for cars, motorcycles and covered parking for bicycles)	N/A	Local Transport Plan 4 (2018) (M2)	This proposed study would involve a comprehensive multimodal review of network efficiency and infrastructure. This study would identify where to focus investment to improve the operation of the local transport network.	WCC/Malvern Hills DC	£20,000	2030	LTP / Developers	Unknown
Road	Malvern Link (A449) Key Corridor of Improvement (Including Public Realm and Junction Enhancement at: Worcester Road / Howsell Road / Pickersleigh Road, Worcester Road / Newtown Road / Hornyold Road, Worcester Road / Pickersleigh Avenue / Richmond Road)	WCC exploring potential funding options.	Local Transport Plan 4 (2018) (M3)	Package of public realm enhancements for Malvern Link Shopping Area, including decluttering of streetscene, maintenance and replacement of street furniture and surfacing (where a need is identified) and a review of all junctions along the corridor.	WCC /Developers	£2 million	2026	LTP / Developers / Malvern Hills District Council	Unknown
Road and Active Travel	Malvern Link - Station Car Park Expansion Scheme	N/A	Local Transport Plan 4 (2018) (M4)	Potential future expansion of Malvern Link Station Car Park to the north of the existing car park, using land formerly occupied by the rail industry.	WMR	£250,000	2026	LTP	Unknown
Active Travel	Active Travel Network Investment Programme	N/A	Local Transport Plan 4 (2018) (M5)	Active Travel Investment Programme is investment in walking and cycling links across Malvern to create a safe, comprehensive, integrated network linking residential areas with key trip attractors, including schools, rail stations, town centres and employment locations. This will include surfacing, signage, lighting and public realm improvements to create an attractive and coherent network.	WCC	£2 million	2030	Developer/LTP	Unknown

¹⁵⁷ Discussion with WCC

Mode focus	Scheme Name	2019 Update	Source (and relevant ref)	Detail	Lead and Delivery Partner	Costs	Delivery Phasing / Forecast Completion	Potential Funding Sources	Gaps in Funding
Road	Malvern Junction Improvements	WCC considered junction improvements challenging as a result of extensive constraints.	Local Transport Plan 4 (2018) (M6 – M13)	A comprehensive review of these junctions in terms of capacity, traffic flows, design and signalling apparatus (where provided) for all suitable transport modes, to identify whether capacity and/or safety improvements are required. If so, this will be followed by a detailed design process to identify a costed improvement scheme to tackle identified issues and constraints.				Developer/LTP	

Table 63 Pershore Package (from LTP4 2018 -2030 and Worcestershire Rail Investment Strategy 2017)

Mode focus	Scheme Name	2019 Update	Source (and relevant ref)	Detail	Lead and Delivery Partner	Costs	Delivery Phasing / Forecast Completion	Potential Funding Sources	Gaps in Funding
Rail	Pershore Rail Station Improvement Scheme	Network Rail considering options for increasing car-parking.	Local Transport Plan 4 (2018) (P1)	This proposed scheme would improve the passenger facilities and information at Pershore Station and would include the provision of new passenger shelters, passenger information, secure cycle and motorcycle parking and car parking enhancements to complement investment by Network Rail and First Great Western in new facilities.	NR (funded by WMR / NR)	£12 million	2025	Network Rail / Developers / LTP / Maintenance	Unknown
Road and Active Travel	Parking Strategy (To include parking for cars, motorcycles and covered parking for bicycles)	No update.	Local Transport Plan 4 (2018) (P3)	A complete plan to improve parking for cars, motorcycles and covered parking for bicycles. This proposed study would involve a comprehensive multimodal review of network efficiency and infrastructure. This study would identify where to focus investment to improve the operation of the local transport network.	WCC/ Wychavon DC	£20,000	2023	Developers/LTP	Unknown
Road	Junction improvements	No update.	Local Transport Plan 4 (2018) (P4 - P7)	A comprehensive review of these junctions in terms of capacity, traffic flows, design and signalling apparatus (where provided) for all suitable transport modes, to identify whether capacity and/or safety improvements are required. If so, this will be followed by a detailed design process to identify a costed improvement scheme to tackle identified issues and constraints.				Developer/LTP/ Maintenance	

Table 64 Worcester Schemes (from LTP4 2018 -2030 and Worcestershire Rail Investment Strategy 2017)

Mode focus	Scheme Name	2019 Update	Source (and relevant ref)	Detail	Lead and Delivery Partner	Costs	Delivery Phasing / Forecast Completion	Potential Funding Sources	Gaps in Funding
Road	Worcester Rainbow Hill/Astwood Road/Bilford Road/ Blackpole Road Key Corridor of Improvement	No update.	Local Transport Plan 4 (2018) (W1)	A systemic investment in a key corridor to improve infrastructure for all suitable transport modes, to enable the corridor to support increased economic activity (through quicker journey times and reduced congestion). This could include new technology (signals/ signing) surfacing, lighting, enhanced walking/cycling infrastructure.	WCC/Developers	£1.5 million	2030	Developer/LTP	Unknown
Road	Worcester - A449 Bromwich Road / A449 Malvern Road / Malvern Road / Canada Way Key Corridor of Improvement	No update.	Local Transport Plan 4 (2018) (W3-W4)	Investment in a key corridor to improve infrastructure for all suitable transport modes, to enable the corridor to support increased economic activity (through quicker journey times and reduced congestion). This could include new technology (signals/ signing) surfacing, lighting, enhanced walking/cycling infrastructure.	NPIF (DfT), WCC	£2 million	2020	Developer/LTP	None/
Road	Worcester East-West Axis Key Corridor of Improvement.	WCC considered the scheme is 50% complete					Easter 2021 (underway)		None
Road	Junction Improvements	No update.	Local Transport Plan 4 (2018) (W5-10)	A comprehensive review of these junctions in terms of capacity, traffic flows, design and signalling apparatus (where provided) for all suitable transport modes, to identify whether capacity and/or safety improvements are required. If so, this will be followed by a detailed design process to identify a costed improvement scheme to tackle identified issues and constraints.	WCC/Developers			Developer/LTP	

A2 Utilities Project Schedule

Table 65 Utilities Infrastructure Schemes

Scheme	2019 Update	Source	Detail	Lead	Cost	Funding Secured		Forecast Completion	Partnership Funding Required	Secured
						2019/20	2020/21			
Improvements to Feckenham 11kV backfeeds	Scheduled for completion in 2018 – unknown status	2018 Long Term Development Statement, Western PD	Improvements 11kV backfeeds within the Feckenham group, which includes the Evesham, Pershore, Brotheridge Green, Strensham and Bevington substations, to improve firm capacity. This was scheduled for completion in 2018.	Western PD	Unknown	Yes	N/A	2018	No	N/A
Active Management Systems (AMS)		2018 Long Term Development Statement, Western PD	Western PD have introduced the AMS where there are multiple complex constraints restricting capacity upgrades. Feckenham Bulk Supply Point (BSP) group is an active AMS area, which operates a Last In, First Out (LIFO) hierarchy. This prioritises the oldest connections when issuing capacity but can offer lower connection costs for new connections.	Western PD	Unknown	Yes	N/A	Ongoing	No	N/A
Catchment scheme at Astley	Planned for AMP7 (2020-25)	Water Resources Management Plan 2018	Increased storage and abstraction capacity to improve the capacity of the Strategy Grid Resource Zone	Severn Trent Water	Unknown	Yes	N/A	Ongoing	No	N/A
11km water pipeline upgrade, Redditch	Planned for AMP7 (2020-25)	Water Resources Management Plan 2018	£1.3m has been designated to upgrade 11km of pipeline in Redditch in the North East of Worcestershire.	Severn Trent Water	£1.3m	Yes	Yes	Unknown	No	N/A
Pershore Primary Substation upgrade	Identified	Arup Utility Engineers	Minimal available capacity, upgrades required to support Pershore developments.	Western PD / Developer	Unknown	N/A	N/A	Depending on proposed development phasing.	Unknown	No
Large scale renewable energy generation	Unknown	Worcestershire Energy Strategy	Aim to triple renewable energy generation by 2030	Unknown	Unknown	Unknown	Unknown	2030	Unknown	Unknown

Scheme	2019 Update	Source	Detail	Lead	Cost	Funding Secured		Forecast Completion	Partnership Funding Required	Secured
						2019/20	2020/21			
Renewable Energy for individual developments	Unknown	2016 South Worcestershire Development Plan	Incorporation of renewable/low carbon energy generation for at least 10% of a developments energy requirement. Potential for decentralised energy and heating networks.	Developer	Unknown	N/A	N/A	N/A	Unknown	Unknown
Potable water network upgrades.	Ongoing	2018 Water Resources Management Plan	Upgrades to underground pipe network in areas surrounding Evesham, Pershore and Worcester.	Severn Trent	Unknown	Unknown	Unknown	Unknown	No	Yes
STW upgrades (Worcester – Bromwich Road STW, Droitwich-Ladywood STW, Malvern STW)	Planned 2020 - 2025	2018 Water Resources Management Plan Consultation with Severn Trent	Works to increase the capacity of existing STWs across the Strategic RZ.	Severn Trent	Unknown	Unknown	Unknown	2025	Unknown	Unknown
STW upgrades (Worcester – Bromwich Road STW, Pershore STW, Droitwich-Ladywood STW, Malvern STW, Upton on Severn STW)	Unknown	Consultation with Severn Trent	Additional capacity upgrades may be required.	Severn Trent	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown

A3 Flood Risk Project Schedule

Table 66¹⁵⁸ Planned Flood Risk Schemes (to be updated following Local Plan consultation November 2019)

Scheme	2019 Update	Source	Detail	Lead, Partners	Cost	Funding Secured		Forecast Completion	Partnership Funding Required / Gap in Funding	Funding Secured or Gap
						2019/20	2020/21			
Malvern Hills										
Severn Stoke Flood Alleviation Scheme	Potential Scheme at appraisal stage	FCERM Capital Investment ^{t159} , SWC IDP (2016) and Flood Risk Strategy Action Plan (2015 -2021)	Raise flood bank and install floodgates to reduce risk to a number of properties and infrastructure.	EA, WCC	£1.5 million	Unknown (to be updated)		2019-2021	Unknown (to be updated)	Unknown (to be updated)
Kempsey Flood Alleviation Scheme	Unknown (to be updated)	SWC IDP (2016)	Works to improve the scheme’s resilience and future maintenance costs	EA	£480,000	£420,000		Unknown (to be updated)	£60,000	Gap: CIL or S106 will be necessary
A449 Powick	Complete	SWC IDP (2016)	Highway adaptation and resilience measures	Worcestershire CC	£70,000	£70,000		Complete	N/A	N/A
Tenbury Wells Flood Alleviation Scheme	Unknown (to be updated)	SWC IDP (2016) and Flood Risk Strategy Action Plan (2015 -2021)	Investigate possible Tenbury flood alleviation scheme	EA, WCC	£5million	Unknown (to be updated)		Unknown (to be updated)	Unknown (to be updated)	Unknown (to be updated)

¹⁵⁸ <https://environment.data.gov.uk/asset-management/index.html?element=download>

¹⁵⁹ <https://data.gov.uk/dataset/1374b3a9-79c9-46c2-a5e7-0f8c4eaa5289/flood-and-coastal-erosion-risk-management-investment-programme-2015-2021>

Scheme	2019 Update	Source	Detail	Lead, Partners	Cost	Funding Secured		Forecast Completion	Partnership Funding Required / Gap in Funding	Funding Secured or Gap
						2019/20	2020/21			
Eardiston , Landridge	Unknown (to be updated)	SWC IDP (2016)	Local flood alleviation measures	Malvern Hills District Council	Unknown (to be updated)	Unknown (to be updated)		Unknown (to be updated)	Unknown (to be updated)	Unknown (to be updated)
Highways Adaptation Scheme, Marina Road, Upton upon Severn	Complete	Flood Risk Strategy Action Plan (2015 -2021)	Highway adaptation and resilience measures	WCC Highways, EA	£5,000,000	£5,000,000		Complete	N/A	N/A
Worcester										
Diglis Worcester , River Severn, Property Level Resilience Scheme	Early Assessment	FCERM Capital Investment and Flood Risk Strategy Action Plan (2015 -2021)	Work with partners, residents and businesses to install appropriate Property-Level Resilience (PLR) measures	EA	Unknown (to be updated)	0	£76,000	2019-2021	£18,000	RDCC
Worcester , River Severn, Property Level Resilience Scheme	Early Assessment	FCERM Capital Investment	Property Level Protection scheme from flooding from River Severn of River Terne	Worcester City Council	Unknown (to be updated)	0	£130,000	Post 2021	£20,000	Update
Blanquettes Estate, Barbourne Brook, Worcester	Unknown (to be updated)	SWC IDP (2016)	Measures to reduce flood risk	EA	£750,000	Unknown (to be updated)	Unknown (to be updated)	Unknown (to be updated)	Unknown (to be updated)	Unknown (to be updated)
Raise New Road, Worcester	Complete	Flood Risk Strategy Action Plan (2015 -2021)	Highway adaptation and resilience measures	WCC Highways (EA STW, Worcestershire Cricket Club, W City)	£1,700,000	£1,700,000		Complete	N/A	N/A
Wychavon										

Scheme	2019 Update	Source	Detail	Lead, Partners	Cost	Funding Secured		Forecast Completion	Partnership Funding Required / Gap in Funding	Funding Secured or Gap
						2019/20	2020/21			
Badsey Brook, Wickhamford and Badsey Property Level Resilience	In construction	FCERM Capital Investment	Scheme to protect 17 homes	EA	Unknown (to be updated)	£51,000	Unknown (to be updated)	2019-2021	£147,000	Unknown (to be updated)
Wickhamford , Badsey Brook Flood Alleviation Scheme	Unknown (to be updated)	SWC IDP (2016)	Flood alleviation measures from Badsey Brook	EA	£250,000	£250,000	Unknown (to be updated)	£0	Unknown (to be updated)	Unknown (to be updated)
Natural Flood Management Scheme (including the Cotswold Tributaries, Dowles Brook and Barbourne Brook)	In construction	FCERM Capital Investment	Development of a natural floor r	EA	Unknown (to be updated)	£153,000	£194,000	2019	£0	Unknown (to be updated)
West Midlands Property Level Resilience - Himbleton, Bow Brook	Early Assessment	FCERM Capital Investment	Scheme to protect 23 homes	EA	Unknown (to be updated)	Unknown (to be updated)	£43,000	2019-2021	£121,000	Unknown (to be updated)
Elmbridge Brook, Hunters Way, Droitwich	Unknown (to be updated)	SWC IDP (2016)	Proposed gauging station on the River Salwarpe to improve flood warning service.	EA	£176,000	£176,000		Unknown (to be updated)	£0	Unknown (to be updated)
A44 Wood Norton	Complete	SWC IDP (2016)	Highway adaptation and resilience measures	Worcestershire CC	£280,000	£280,000		Complete	N/A	N/A
B4048 Pershore	On indefinite hold	SWC IDP (2016)	Highway adaptation and resilience measures	Worcestershire CC	£100,000	£100,000		On indefinite hold	N/A	N/A
Kemerton Flood Alleviation	Complete	SWC IDP (2016) and Flood Risk	Local flood alleviation measures	WCC, SWLDP	£39,500	£39,500		Complete	N/A	N/A

Scheme	2019 Update	Source	Detail	Lead, Partners	Cost	Funding Secured		Forecast Completion	Partnership Funding Required / Gap in Funding	Funding Secured or Gap
						2019/20	2020/21			
		Strategy Action Plan (2015 -2021)								
Evesham Property Level Protection	Unknown (to be updated)	SWC IDP (2016) and Flood Risk Strategy Action Plan (2015 -2021)	Property level protection scheme from River Avon.	EA, SWLDP, WCC	£825,000	£825,000		Unknown (to be updated)	Unknown (to be updated)	RFCC confirmed.
Himbleton , Bow Brook	Unknown (to be updated)	SWC IDP (2016)	Measures to reduce flood risk.	EA	£150,000	£150,000		Unknown (to be updated)	Unknown (to be updated)	Unknown (to be updated)
Broadway Brook	Unknown (to be updated)	SWC IDP (2016)	Culvert Improvements	EA	£130,000	Unknown (to be updated)		Unknown (to be updated)	Unknown (to be updated)	Unknown (to be updated)
Lower Moor Flood Alleviation Scheme	Complete	SWC IDP (2016) and Flood Risk Strategy Action Plan (2015 -2021)	Drainage improvements	SWLDP, WCC	£156,500	£156,500		Complete	N/A	N/A
Pebworth and Broad Marston	Unknown (to be updated)	SWC IDP (2016)	Feasibility study, modelling, implementation plus property level protection	EA	£5.6million	Unknown (to be updated)		Unknown (to be updated)	Unknown (to be updated)	Unknown (to be updated)
Norchard Lane, Peopleton	Unknown (to be updated)	SWC IDP (2016)	Property Level Protection	WDC	Unknown (to be updated)	Unknown (to be updated)		Unknown (to be updated)	Unknown (to be updated)	Unknown (to be updated)
Drakes Broughton	Unknown (to be updated)	SWC IDP (2016)	Culvert Improvements	WDC	Unknown (to be updated)	Unknown (to be updated)		Unknown (to be updated)	Unknown (to be updated)	Unknown (to be updated)

Scheme	2019 Update	Source	Detail	Lead, Partners	Cost	Funding Secured		Forecast Completion	Partnership Funding Required / Gap in Funding	Funding Secured or Gap
						2019/20	2020/21			
Droitwich Town Centre Flood Alleviation Scheme	Unknown (to be updated)	SWC IDP (2016)	Flood Alleviation measures	WDC	Unknown (to be updated)	Unknown (to be updated)		Unknown (to be updated)	Unknown (to be updated)	Unknown (to be updated)
Hampton, Evesham	Unknown (to be updated)	SWC IDP (2016)	Flood Alleviation Scheme	WDC	Unknown (to be updated)	Unknown (to be updated)		Unknown (to be updated)	Unknown (to be updated)	Unknown (to be updated)
Pershore Property Level Protection	Unknown (to be updated)	SWC IDP (2016)	Flood Alleviation Scheme	WDC	£13,000	Unknown (to be updated)		Unknown (to be updated)	Unknown (to be updated)	Unknown (to be updated)
Uckinghall , Flood Protection Scheme	Unknown (to be updated)	SWC IDP (2016)	Flood Protection Scheme	WDC	£20,000	Unknown (to be updated)		Unknown (to be updated)	Unknown (to be updated)	Unknown (to be updated)
Wick Property Level Protection	Unknown (to be updated)	SWC IDP (2016)	Scheme to protect 12 properties	WDC	£69,000	Unknown (to be updated)		Unknown (to be updated)	Unknown (to be updated)	Unknown (to be updated)
Hunters Way, Droitwich , Property Level Resilience	Unknown (to be updated)	Flood Risk Strategy Action Plan (2015 -2021)	Work with partners, residents and businesses to install Property-Level Resilience	EA	£176,000	Unknown (to be updated)		2018	Unknown (to be updated)	RFCC
Strategic Schemes										
Highway surface water drainage capital schemes	Schemes Completed (since 1/4/2016): 103 schemes Schemes programmed (2019 onwards): 83 schemes	SWC IDP (2016)	Schemes to improve highway/surface water drainage	WCC	Schemes Completed (since 1/4/2016): £1.67 million Schemes programmed (2019 onwards): £0.96 million	TBC		Ongoing	N/A	N/A
Property-level Resilience	In progress	Flood Risk Strategy	Identify floodspots where Property	WCC, SWLDP, EA, STWK	TBC	TBC		April 2017	TBC	TBC

Scheme	2019 Update	Source	Detail	Lead, Partners	Cost	Funding Secured		Forecast Completion	Partnership Funding Required / Gap in Funding	Funding Secured or Gap
						2019/20	2020/21			
		Action Plan (2015 -2021)	Level Resilience (PLR) is likely to form a part of the solution and form a clustered funding package(s).							
Coordinate and embed upstream catchment management	WCC now host a Defra funded Natural Flood Management (NFM) Project running until March 2021, this covers 3 catchments areas across Worcestershire	Flood Risk Strategy Action Plan (2015 -2021)	NFM Project	WCC, NWWM, SWLDP, EA	£500,000	£500,000		March 2021	N/A	N/A

A4 Telecoms Project Schedule

Table 67 Telecoms Infrastructure Schedule

Scheme	2019 Update	Source	Detail	Lead	Cost	Funding Secured		Forecast Completion	Partnership Funding Required	Secured
						2019/20	2020/21			
Installing FTTP for all new developments and ensuring market choice in providers	N/A	Discussions with WCC	Install FTTP as standard to new developments across the SWC area.	Developer. Market Providers	N/A	N/A	N/A	N/A	N/A	Site-specific

A5 Education Project Schedule

Table 68 Education Infrastructure Schedule

Scheme	Detail	Lead	Estimated Cost	Forecast Completion	Secured
Land required for additional physical infrastructure	New schools and expansion to existing schools will require new land, the cost of which is not captured through the application of benchmarks.	All	TBD	Throughout the plan period	No
Kempsey Primary School	0.5 Additional Forms of Entry per year group and 105 new places	School	£500,000	2020	Yes
Hanley Castle High	Expansion by 18 places per year group and 90 new places	School	£1,534,000	2020	Yes
Pershere High School	1 Additional Form of Entry Y8-11 per year group and 120 new places	School	£2,250,000	2021	Yes
3FE expansion at Secondary schools in Worcester City	3 Additional Forms of Entry per year group and 300 new places	School	£7,671,000	2021	Yes
Honeybourne Primary Academy	Expansion to one Form of Entry per year group and 70 new places	School	£918,050	2021	Yes
Welland Primary Academy	Expansion to one Form of Entry and 70 new places	School	£918,050	2021	Yes
Evesham Town 1FE First Expansion	1 Additional Form of Entry and 180 new places	TBD	£2,754,150	2022	No
New South Worcester Free School	New 2 Form of Entry Primary School and Nursery on the South Worcester Urban Expansion to support new housing	WCC	TBD	2023	No
New West Worcester Free School	New 2 Form of Entry Primary School and Nursery on the West Worcester Urban Expansion to support new housing	WCC	TBD	2024	No
3FE expansion at Secondary schools in Worcester City	3 Additional Forms of Entry per year group and 300 new places	School	TBD	2023	No
Droitwich increase of provision	1 Additional Form of Entry in all phases in Droitwich Town to support new housing	TBD	TDB	TDB	No
Evesham Expansion of provision	0.5 Additional Form of Entry in all phases in Evesham Town to support new housing	TBD	TBD	TBD	No

Scheme	Detail	Lead	Estimated Cost	Forecast Completion	Secured
Malvern Town increase of provision	2 Additional Forms of Entry per year group at both Primary and Secondary level to support new housing	TBD	TBD	TBD	No
Throckmorton Requirements	3-4 Additional Forms of Entry at all phases to support this development to support new housing	TBD	TBD	TBD	No
Pershore Town Primary age Provision	2 Additional Forms of Entry to support new housing	TBD	TBD	TBD	No
Pershore Town Secondary age Provision	4 Additional Forms of Entry to support new housing	TBD	TBD	TBD	No
Pershore Rural Schools Expansions	2 Additional Forms of Entry at rural schools to support new housing	TBD	TBD	TBD	No
Parkway New Education Planning Area	New Primary and Secondary provision to support new housing	TBD	TBD	TBD	No
Tenbury Wells Primary Expansion	0.5 Additional Forms of Entry in Tenbury to support new housing	TBD	TBD	TBD	No
Upton Primary Expansion	Additional capacity in all phases of education to support new housing	TBD	TBD	TBD	No
Rushwick New Primary School	New 2 Form of Entry Primary School to support new housing	TBD	TBD	TBD	No
Worcester City Primary provision	2 Additional Forms of Entry in Worcester City to support new housing	TBD	TBD	TBD	No
Worcester City Secondary provision	4 Additional Forms of Entry in Worcester City to support new housing	TBD	TBD	TBD	No

A6 Healthcare and Social care Project Schedule

Table 69 Planned Schemes

Scheme	2019 Update	Source	Detail	Lead	Cost	Funding Secured		Forecast Completion	Partnership Funding Required	Secured
						2019/20	2020/21			
Paediatric Ward and Assessment Unit, Worcestershire Royal Hospital	Anticipated start in 2019/2020	FoAHSW ¹⁶⁰	Business Case submitted including expansion of wards at Worcestershire Royal.	AHT	Unknown	Yes – NHS England	Yes – NHS England	Originally May 2020 (this date has been delayed)	NHS England	Yes
Worcester Royal Hospital Mental Health Services	Relocation to occur Autumn 2019	WHCT Estate Strategy / One Public Estate	The Moor Street, Crowngate and Lowesmoor clinics are unsuitable for current needs and are relocating to Worcester Royal.	HCT	Unknown			Autumn 2019		
Isaac Maddox House (HCT HQ relocation)		WHCT Estate Strategy	Unidentified relocation sought.	HCT	Unknown	No	No	Unknown	No	N/A
Worcester Parkway / South Worcester Urban Extension	Recently identified scheme through consultation	Primary Care Estates Strategy	New primary care services on one/both strategic allocations.	CCG	£5m minimum	No	No	Mid-2020s	No	N/A
Replacement of Thornloe Lodge	Outline business case submitted	Primary Care Estates Strategy	Proposed replacement of Thornloe Lodge surgery with improved access and increased capacity/extended hours.	CCG	£6m	Part	Part	2022	Unknown	N/A
Redevelopment of Tenbury Surgery	Outline Business case in preparation	Primary Care Estates Strategy	Proposed redevelopment of the Tenbury Surgery site to provide adequate primary care coverage.	CCG	£1.25m	No	No	2020/21	Unknown	N/A
Replacement of Great Witley Surgery	Outline Business case in preparation	Primary Care Estates Strategy	Proposed replacement of the Great Witley Surgery site to provide adequate primary care coverage.	CCG	£2.5m	No	No	2020/21	Unknown	N/A
Redevelopment of Barn Close Surgery	In construction	Primary Care Estates Strategy	In construction redevelopment of the a 930sqm new surgery premises including outreach and community services.	CCG	£2.4m	Yes	Yes	2019/20	Yes - £1.98m NHS Capital	Yes

¹⁶⁰ Future of Acute Hospital Services in Worcestershire programme (2017)

Scheme	2019 Update	Source	Detail	Lead	Cost	Funding Secured		Forecast Completion	Partnership Funding Required	Secured
						2019/20	2020/21			
Evesham Surgery replacement	Concept	Primary Care Estates Strategy	Proposed replacement of Evesham Surgery. Could be linked with the redevelopment /replacement of the Evesham Community Hospital.	CCG/ HCT	£3m	No	No	Linked to Evesham Hospital project	Unknown	No
Corbett Surgery lease renewal / replacement	Concept	Primary Care Strategy	Renewal of existing lease, which currently expires in 2027, or replacement of Corbett Surgery.	CCG	£3m	No	No	2027	Unknown	No
Evesham Community Hospital replacement	Latest round of bidding unsuccessful	WHCT Estate Strategy / ECH Capital bid to NHS Improvement	Replacement with a like-for-like 50 bed facility including the county-wide stroke rehab unit. This should be supported by additional community facilities which improve out of hospital care. Release of the previous site would create £5m worth of surplus land capable of delivering 81 housing units.	HCT	£27m	No	No	2022	£19m needed from NHS England / NHS Improvement	No
Children's Respite care at Malvern Community Hospital	Funding secured	Consultation with HCT	Internally funded programme to provide Children's Respite Care at the Community Hospital.	HCT	Unknown	Yes – HCT	Yes – HCT	2019/20	No	N/A

A7 Community Facilities Project Schedule

Table 70 Community Facilities Infrastructure Schemes

Scheme	2019 Update	Source	Detail	Lead	Cost	Funding Secured		Forecast Completion	Partnership Funding Required	Secured
						2019/20	2020/21			
Worcester City Art Gallery and Museum improvements	Proposal	Joint Museums Committee	Improvements to Visitor access Visitor facilities Upgrade displays and public access	Museums Worcestershire	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Commandery Museum improvements	Proposal	Joint Museums Committee	Improvements to Visitor access Visitor facilities Upgrade displays and public access	Museums Worcestershire	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Worcestershire County Museum improvements	Proposal	Joint Museums Committee	Improvements to Visitor access Visitor facilities Upgrade displays and public access	Museums Worcestershire	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Museums Worcestershire Collections Centre improvements	Proposal	Joint Museums Committee	Improvements to Storage of archaeological archives Visitor access Visitor facilities Upgrade displays and public access	Museums Worcestershire	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Astley and Dunley Village Hall improvements	Proposal	Table 7a) Community Buildings Report ¹⁶¹	Access and facilities need updating.	Astley and Dunley Parish Council	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Lower Broadheath Memorial Hall Car Park expansion	Proposal	Table 7a) Community Buildings Report	Parking insufficient to meet needs and also used by neighbouring school.	Lower Broadheath Parish Council	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Broadwas and Cotheridge Village Hall Expansion	Feasibility	Table 7a) Community Buildings Report	Council is in the process of pursuing an extension to the village hall and completing a Neighbourhood Development Plan	Broadwas and Cotheridge Parish Council	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown

¹⁶¹ [1] Community buildings and halls in South Worcestershire: Final report and recommendations (SWCs Leisure and the Environment in assoc. with Ethos Environmental Planning Ltd, May 2019)

Scheme	2019 Update	Source	Detail	Lead	Cost	Funding Secured		Forecast Completion	Partnership Funding Required	Secured
						2019/20	2020/21			
Hallow Village Hall Main Hall Replacement	Proposal	Table 7a) Community Buildings Report	Hallow Parish Council is considering using s.106 monies and CIL to improve the Hall but is also looking at other options to extend range of meeting space. No decision has been made.	Hallow Parish Hall / Charitable Trust	Unknown	S.106 / CIL	Unknown	Unknown	Unknown	Unknown
Lindridge Parish Hall – conversion to multi-use facility	Proposal	Table 7a) Community Buildings Report	Aspirations to support indoor/outdoor provisions in Eardiston under S106 if development was to take place in Eardiston.	Lindridge Church / Parish Council	Unknown	S.106 / CIL	Unknown	Unknown	Unknown	Unknown
Martley Village (Memorial) Hall Car Park improvements and meeting space	Proposal	Table 7a) Community Buildings Report	Village lacks meeting place. Continue upgrading the Memorial Hall. Good facility but needs more parking space.	Martley Parish Council	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Castle Morton Village Hall Extension	Feasibility	Table 7a) Community Buildings Report	There are plans in place for an extension which will improve the storage and toilets and provide an additional meeting room.	Castle Morton Village team	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Eastham Memorial Hall – replacement hall	Feasibility	Table 7a) Community Buildings Report	BLF funds sought for a new hall, legal issues have held the project up, but PC are hopeful of a good outcome.	Eastham PC and Hall trustees	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Abberley Common Village Hall expansion	Proposal	Table 7a) Community Buildings Report	MHDC need to confirm that S106 is coming to Abberley for the PC to put together the much-needed land extension plans for the Village Hall to include play area and community outdoor meeting space	Abberley Parish Council	Unknown	S.106 / CIL	Unknown	Unknown	Unknown	Unknown
Little Witley Village Hall	Proposal	Table 7a) Community Buildings Report	The PC identifies that the village Hall is used all day every day. An extension would be well used.	Witley and Hillhampton Parish Council	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Cathedral Ward – new community centre	Proposal	Table 7a) Community Buildings Report	Need for a community centre: There has been extensive development and large increase in population in new Diglis and the Porcelain works. A community centre was planned here but this has not materialised.	None	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown

Scheme	2019 Update	Source	Detail	Lead	Cost	Funding Secured		Forecast Completion	Partnership Funding Required	Secured
						2019/20	2020/21			
St.Peters Village Hall – replacement hall	Proposal	Table 7a) Community Buildings Report	The current small village hall needs to be replaced at the end of its lease by a facility capable of hosting current clubs and societies whilst also being large enough to extend this to recreational activities for the youth.	St. Peter the Great Parish Council	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Tibberton Parish Hall New Village Hall	In construction	Table 7a) Community Buildings Report	The Parish Council in the process of building a new village hall to suitable for the future needs of the village.	Tibberton Parish Council	Circa £600k	Yes	N/A	Unknown	£440,000 from Tibberton Community Land Trust £96,000 from Tibberton Parish Council's reserves, £9,000 from a Wychavon District Council and a £18,112 New Homes Bonus grant from Wychavon.	Yes
Drakes Broughton Village Hall refurbishment	Proposal	Table 7a) Community Buildings Report	The hall really needs updating and total refurbishing to increase usage for all kinds of groups within the community	Drakes Broughton Parish Council	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Strensham Village Hall improvements	Feasibility	Table 7a) Community Buildings Report	The Parish Council has secured New Homes Bonus funding for improvement of Village Hall facilities, with work due to start soon.	Strensham Parish Council	Unknown	Yes	N/A	Unknown	New Homes Bonus	Yes
Sedgeberrow Village Hall interim Community Hub / redevelopment	Proposal	Table 7a) Community Buildings Report	Sedgeberrow Communities Group led by the Parish Council are seeking to re-establish an interim Community Hub whilst seeking to develop a scheme for the re-introduction of a Community Hall	Sedgeberrow Communities Group led by the Parish Council	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Charlton School Rooms improvements	Proposal	Table 7a) Community Buildings Report	Disability access, improved outside area (tarmac or pave) new toilets and improved external storage.	Charlton School Rooms Management	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Hartlebury Parish Hall improvements	In construction	Table 7a) Community Buildings Report	Project already underway to improve the Parish Hall and	Hartlebury Parish Council	Unknown	Yes	N/A	Unknown	Unknown	Unknown

Scheme	2019 Update	Source	Detail	Lead	Cost	Funding Secured		Forecast Completion	Partnership Funding Required	Secured
						2019/20	2020/21			
			recreational facilities within the village.							
Honeybourne Village Hall new hall	In construction	Table 7a) Community Buildings Report	A new Community Centre is well under way to being built as the old Village Hall is inadequate.	Honeybourne Parish Council	Unknown	Yes	N/A	Unknown	Unknown	Unknown
Cookhill Village Hall Refurbishment	Feasibility	Table 7a) Community Buildings Report	Refurbishment of hall	Cookhill Parish Council	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Inkberrow Village Hall Improvements to car park	Proposal	Table 7a) Community Buildings Report	Outside lighting to car parks to side and rear of building	Inkberrow Parish Council	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Hampton Lovett & Westwood Village Hall improvements	Proposal	Table 7a) Community Buildings Report	The Old Victorian Sunday School Room is in need of up-dating.	Hampton Lovett and Westwood Parish Council	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Ombersley Village Hall refurbishment	Proposal	Table 7a) Community Buildings Report	Ombersley Village Hall needs refurbishment. Some money has been raised but nowhere near enough.	Ombersley Council	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Pershire Youth Centre – new centre	Planning	Table 7a) Community Buildings Report	The Town Council has spent two years researching the possibility of providing a new hall as well as undertaking public consultation. As a result, a new hall is to be built in Defford Road. New Community Hall needed - planning permission already submitted for one.	Pershire Town Council	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Wyre Piddle Parish Hall Expansion	Proposal	Table 7a) Community Buildings Report	Village Hall could benefit from internal alterations of provide a more flexible space and scope for more diverse community events	Wyre Piddle Parish Council	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Upton Snodsbury Village Hall – youth provision	Proposal	Table 7a) Community Buildings Report	The village hall committee is currently looking at improving facilities so that provision could be made for young people.	Flyford Flavell, Grafton Flyford and North Piddle Parish Councils	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Peopleton Village Hall improvements	Proposal	Table 7a) Community	Seeking funding to upgrade the facilities which have not been replaced since the hall was built in the 1950's	Peopleton Parish Council	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown

Scheme	2019 Update	Source	Detail	Lead	Cost	Funding Secured		Forecast Completion	Partnership Funding Required	Secured
						2019/20	2020/21			
		Buildings Report								

A8 Sports and Recreation Project Schedule

Table 71 Sports and Recreation Infrastructure Schedule

Scheme	2019 Update	Source	Detail	Lead	Cost	Funding Secured		Forecast Completion	Partnership Funding Required	Secured
						2019/20	2020/21			
Langland Stadium – 3G AGP	In Construction	2015 Playing Pitch Strategy	Identified requirement from the PPS. New 3G pitch at Langland Stadium for Malvern Town FC.	Malvern Town FC/ Malvern Hills Council	£1m	Yes	Yes	September 2019 ¹⁶²	£700,000 from the Football Foundation £300,000 from s.106	Yes
Playing fields and MUGA at Newland Development	Outline planning granted in Jan 2019	2015 Playing Pitch Strategy Application 15/01625/OUT	Identified requirement from the PPS and secured through outline planning application	Developer	Unknown	Yes	Yes	Unknown	None	N/A
3G pitch and Worcestershire FA HQ at Claines Lane	Planning granted in Dec 2018	2015 Playing Pitch Strategy	Identified requirement from the PPS. Renovation of Worcester Raiders' ground and a new HQ for Worcestershire Fa.	Worcestershire FA	Unknown	No	No	End of 2019 ¹⁶³	Yes – bids to be made	No
Hockey Centre Old Porcelain Ground	Funding Secured	Worcester City Council committee minutes	Identified requirement from the PPS. Joint venture between Royal Grammar School and Hockey club to deliver two international-standard AGPs.	RGS Worcester / Worcester Hockey Club	£2.5m ¹⁶⁴	Yes	No	September 2020	£2.1m loan sought from Worcester City Council	No
Worcester City FC new stadium	Planning Appeal granted for new stadium at Perdiswell.	2015 Playing Pitch Strategy	Identified requirement from the PPS. New stadium for Worcester City needed.	Worcester City FC	Unknown	No	No	Unknown	Unknown	Unknown

¹⁶² <https://www.worcesternews.co.uk/news/17003148.february-start-for-malvern-town-fcs-1-million-revamp/>

¹⁶³ <https://www.worcesternews.co.uk/sport/17306746.worcestershire-fa-claines-lane-revamp-could-start-in-summer/>

¹⁶⁴ <https://www.worcesternews.co.uk/news/17673066.multi-million-state-of-the-art-hockey-centre-set-to-be-built-in-worcester/>

Scheme	2019 Update	Source	Detail	Lead	Cost	Funding Secured		Forecast Completion	Partnership Funding Required	Secured
						2019/20	2020/21			
	Project held in abeyance									
RGS Worcester Tennis Centre	Council approved Tennis Network Project	City Council committee minutes	Refurbishment of Parks Courts, New Tennis Centre in partnership with RGS Worcester, Tennis Network Partnership	Tennis Network partnership	Unknown	Yes	Unknown	Unknown	Funding secured from the LTA	Unknown
Indoor Cricket Centre	Announced 7th August 2019	Media release	New indoor cricket training facility at Riverside Campus, Worcester University, to be used by Worcestershire County Cricket Club, National base for Disability Cricket	Worcestershire Cricket Board, University of Worcester, ECB	£8m	Yes	Unknown	Unknown	Yes – from WCB, UoW and ECB	Unknown
Relocation of Evesham Cricket Club	Planning approved in August 2016 for new ground at Cheltenham Road165	2015 Playing Pitch Strategy	Identified requirement from the PPS. Relocation required due to constant flooding of existing ground.	Evesham Cricket Club	£1.2million	No	No	Unknown	Unknown	Unknown
Modernisation of Droitwich Cricket Club Pavilion	Application 17/02213/FUL approved for extension in Jan 2018166	2015 Playing Pitch Strategy	Identified requirement from the PPS. Extension to existing cricket/football pavilion (single storey).	Droitwich Cricket Club	£900,000	No	No	Unknown	Unknown	Unknown
Relocation of Malvern RFC	Joint venture between MHDC and	2015 Playing Pitch Strategy	Identified requirement from the PPS. Relocation of the club and construction of a	Malvern RFC and Malvern Hills District Council	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown

¹⁶⁵ <https://eveshamobserver.co.uk/news/cricket-ground-move-will-bail-club/>

¹⁶⁶ <https://plan.wychavon.gov.uk/plandisp.aspx?recno=92593>

Scheme	2019 Update	Source	Detail	Lead	Cost	Funding Secured		Forecast Completion	Partnership Funding Required	Secured
						2019/20	2020/21			
	the RFC being pursued.		purpose built ground with modern facilities ¹⁶⁷							
Droitwich Leisure Centre	Discussions with SWC officers	Discussions with SWC officers	Identified need for replacement or significant refurbishment of the leisure centre within the next 3-5 years.	Wychavon District Council	£12million	No	No	Unknown	Unknown	Unknown

¹⁶⁷ <https://www.malvern hills.gov.uk/-/talks-open-on-rugby-club-s-future>

A9 Green Infrastructure and Open Space Project Schedule

Table 72 Green Infrastructure and Open Space Infrastructure Schedule

Scheme	2019 Update	Source	Detail	Lead	Cost	Funding Secured		Forecast Completion	Partnership Funding Required	Secured
						2019/20	2020/21			
Newland, Malvern Concept Plan implementation	Planning application approved subject to section 106. GI to be implemented alongside development.	Consultation with South Worcestershire Councils	Developer to implement onsite green infrastructure in accordance with the Concept Plan.	Developer / WCC	Unknown	Unknown	Unknown	Unknown	No	N/A
West of Worcester Urban Extension Concept Plan implementation	Planning application approved subject to section 106. . GI to be implemented alongside development.	Consultation with South Worcestershire Councils	Developer to implement onsite green infrastructure in accordance with the Concept Plan.	Developer / WCC	Unknown	Unknown	Unknown	Unknown	No	N/A
Worcester South Urban Extension Concept Plan implementation	Planning approved subject to section 106. GI to be implemented alongside development.	Consultation with South Worcestershire Councils	Developer to implement onsite green infrastructure in accordance with the Concept Plan.	Developer / South Worcestershire Councils	Unknown	Unknown	Unknown	Unknown	No	N/A

A10 Emergency Services Project Schedule

Table 73 Emergency Services Infrastructure Schemes

Scheme	2019 Update	Source	Detail	Lead	Cost	Funding Secured		Forecast Completion	Partnership Funding Required	Secured
						2019/20	2020/21			
Broadway Fire Station Relocation / Redevelopment	No update	HWFRS Asset Management Strategy	Assessed in the Strategy as being in poor condition with inadequate facilities. The Strategy indicates that there is potential to rebuild on existing site if alternative location cannot be found.	HWFRS	Unknown	No	No	Unknown	Unknown	No
Pershore Fire Station redevelopment / relocation.	No update	HWFRS Asset Management Strategy	Explore potential to dispose of site for development if this can fund and alternative location.	HWFRS	Unknown	No	No	Unknown	Unknown	No
Malvern Fire Station – Police co-location	No update	HWFRS Asset Management Strategy	The HWFRS Asset Management Strategy outlines that there is an agreement in place for British Transport Police co-location.	HWFRS / British Transport Police	Unknown	Yes	Unknown	Unknown	Unknown	Unknown
Ambulance fleet renewal	No update	https://wmas.nhs.uk/2019/06/05/trust-to-invest-40m-in-300-new-ambulances/	West Midlands Ambulance Service is set to maintain its position of being the only ambulance service with no operational vehicles over five years old with the announcement of an order for 300 new ambulances.	WMAS	£40m	Yes	Yes	First issue: August 2019	No	No

A11 Waste Project Schedule

Table 74 Waste Infrastructure Schedule

Scheme	2019 Update	Source	Detail	Lead	Cost	Funding Secured		Forecast Completion	Partnership Funding Required	Secured
						2019/20	2020/21			
Energy from Waste Refit (from 2042 onwards)	Not identified within 2016 IDP	WCC Emerging Growth and Infrastructure Strategy	Recognition that the lifespan of the EfW facility is approximately 25 years, and therefore from 2042	WCC	Unknown	No	No	Unknown – review at IDP Review	Likely	N/A
Responding to the outcomes of Government Consultations on Resources and Waste Strategy	Not identified within 2016 IDP	WCC Emerging Growth and Infrastructure Strategy	Recognition that the Resource and Waste Strategy is likely to have implications for collection and types of waste needing to be sorted and bulked within SWC	WCC	Unknown	No	No	Unknown – review at IDP Review	Likely	N/A
Capacity improvements at Malvern and Worcester East HWRC	Not identified within 2016 IDP	WCC Emerging Growth and Infrastructure Strategy	Capacity improvements at both HWRC to support proposed levels of growth	WCC	Unknown	No	No	Unknown	Unknown	N/A