Hyas

Rotherham Metropolitan Borough Council
Rotherham Local Plan

2020 Infrastructure Delivery Study

Final Report - March 2021

Draft

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Fore

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Executive Summary

The Rotherham Metropolitan Borough Council (RMBC) Core Strategy sets out a spatial strategy for the Borough over the period 2013-2028. The Core Strategy was adopted by the Council in 2014 and was supported by a range of evidence base documents, including an Infrastructure Delivery Study published in 2012.

The Council is currently taking forward a Partial Update of the Core Strategy 2014. This includes updating the assessment of housing (and other) requirements over an extended period up to 2040. Policies relating to housing, flood risk and water management, climate change and carbon reduction, and the presumption in favour of sustainable development are being updated, along with the infrastructure requirements to support new growth.

Many aspects have changed, and the Council is now looking ahead to ensure that the Council has an up-to-date evidence base and relevant information to inform decision making. Significant infrastructure improvements have taken place since the preparation of the 2012 study, and the wider circumstances have changed not least due to the ongoing COVID-19 pandemic.

The Partial Update of the Core Strategy will examine potential different levels of growth up to 2040, taking into account existing proposals and additional requirements. Two potential future housing growth development scenarios have been established:

- Scenario 1 sets out a requirement for an additional 8,832 dwellings to 2040 with growth focussed on the Rotherham Urban Area, primarily through existing housing allocations plus some new allocations in a limited number of settlements.

- Scenario 2 delivers higher growth based on an additional 14,203 dwellings to 2040. The growth is again focussed on the Rotherham Urban Area with additional growth across other settlements.

This report provides updates the Infrastructure Delivery Study and sets out the range of infrastructure requirements that will be needed to support future development and growth up to 2040 (based on the above scenarios). It considers not only the requirements of infrastructure to support, facilitate and accompany growth, but also the role it can play as part of economic recovery, addressing climate change and planning effectively for a post-COVID-19 world.

It forms part of the evidence base to consider and support the Partial Update of the Core Strategy. This 2020 Infrastructure Delivery Study (2020 IDS) provides a summary of the infrastructure required for the Borough, according to the level of development proposed to meet the area's needs for housing, employment and retail. It includes details of committed and planned schemes by infrastructure type and an assessment of additional requirements based on engagement work undertaken during the latter half of 2020.

Scope of Infrastructure

The importance of infrastructure is highlighted in national planning policy and guidance and consequently this Update has been written to meet requirements of the National Planning Policy Framework and Planning Practice Guidance. The National Planning Policy Framework states that strategic policies should make provision for a range of infrastructure, and that policy makers should engage with infrastructure providers.

The term "infrastructure" includes a number of components. The Update provides information on infrastructure across the following eight broad categories:

- Transport;
- Utilities;
- Education;
- Health;
- Waste;
- Blue and Green Infrastructure;
- Community Facilities; and
- Emergency Services.

Each infrastructure category has been examined in turn focusing on Borough wide and area specific infrastructure requirements to support growth at particular settlements/urban areas and at strategic sites such as at Bassingthorpe Farm and Waverley.

This refreshed Infrastructure Delivery Study goes on to set out the implications for the Partial Update of the Core Strategy, including setting out what infrastructure is required where and when.

This Study is intended to be a living document which reflects the latest available inputs and data as at Autumn 2020. It seeks to provide the most accurate picture of infrastructure requirements and costs possible at this point in time and potential sources of funding. Effort has been made to provide costing for all requirements but where such data is not available this is made clear in the report.

A range of evidence has been gathered to support this Update, primarily through a review of the previous 2012 study, existing sources of data and information, and further dialogue with key agencies and infrastructure providers. A series of (virtual) workshops were also held to consider and test the information with a wide range of providers in Autumn 2020. This stakeholder engagement exercise, and the sharing of their associated infrastructure plans and information, has formed the basis for preparing this 2020 IDS.

This 2020 IDS should be considered alongside other documents being prepared to support the Partial Update of the Core Strategy. In particular the Developer Contributions Supplementary Planning Document (SPD) which will provide a clear framework for the Council's strategic approach to policy

requirements and mitigations, a systemic base for negotiating S106 and give specific advice to Developers regarding how contributions will be calculated.

Infrastructure Requirements & Costs

Overall, around £480 million of infrastructure projects are identified (at Autumn 2020) as being required to support future growth to 2040, with the majority relating to transport, green/blue infrastructure and utilities. Whilst the scale of development proposed under the 2 separate development scenarios differs and therefore some infrastructure requirements related to population growth (such as education provision) will be lower under Scenario 1, there is little difference between the requirements for each scenario. One transport project (M18 Junction 1 improvements) would be triggered by the additional growth associated with Scenario 2. 70% of the identified estimated infrastructure project costs are related to requirements for specific settlements/urban areas identified under the development scenarios.

Summary of Infrastructure Costs to 2040

Infrastructure Type	Cost of Infrastructure Interventions	Non-Area Specific Infrastructure Intervention Costs	Area Specific*** Infrastructure Intervention Costs
Transport	£328,359,163 * (£948,359,163) **	£113,900,000 * (£733,900,000) **	£214,459,163
Utility	£51,400,000	-	£51,400,000
Education	£29,970,000	-	£29,970,000
Health	£7,900,000	-	£7,900,000
Waste	-	-	-
Green & Blue Infrastructure	£61,600,000	£28,900,000	£32,700,000
Community	£1,746,800	£1,250,000	£496,800
Emergency Services	£1,100,000	£1,100,000	-
Total	**£482,075,963***	**£145,150,000***	**£336,925,963**

*excludes **includes SCR costs for Supertram Renewal & Sheffield City Region Innovation Corridor
*** costs relate to specific settlements/urban areas identified in the development scenarios

No infrastructure issue has been identified through the 2020 IDS that would prevent development taking place across the Borough of Rotherham in line with the 2 development scenarios or in particular areas or settlements.

In both development scenarios, the main focus of growth is the Rotherham Urban Area, which includes the Bassingthorpe Farm Strategic Allocation. 40% of area specific infrastructure costs relate to the Rotherham Urban Area. Transport, utility (Superfast South Yorkshire and City Fibre) and the Rotherham Renaissance Flood Alleviation Scheme infrastructure projects account for much of these costs. Critical projects required to facilitate the delivery of Bassingthorpe Farm are reflected in this study including education, health, transport, waste water treatment and green and blue infrastructure. Whilst much of the significant infrastructure has already been delivered for the Waverley strategic site there are education health and other community infrastructure needs associated with the later build phases.

There will be phasing issues to address looking to 2040, with transport and utilities infrastructure in particular linked to the timing of specific development activity.

This study has identified infrastructure that would serve development in more than one local authority area. In particular, there are joint infrastructure issues with the Sheffield City Region (particularly Sheffield) and other neighbours such as Bassetlaw especially in terms of transport, utilities, drainage, flood risk and health services.

Funding sources

The Infrastructure Schedule has identified sources of committed funding where this is known. Not all funding is yet in place for all the identified infrastructure. This is not unusual, as funding programmes across the various stakeholders involved seldom stretch out over the full period of the Partial Update to 2040.

There are a variety of potential funding sources available for the provision of strategic and site-based infrastructure to address future requirements. A range of funding opportunities are set out in this study. Sources include Government agencies and competitive funding rounds such as the Transforming Cities and Housing Infrastructure Funds. Devolved funding to the Sheffield City Region will have a more prominent role, especially for transport. This study provides important evidence to inform the development of Infrastructure Place Packages, as part of the Sheffield City Region Growth Area approach.

The list of potential sources is not exhaustive – other funding streams may also be available and others as yet not defined will appear over time.

It is widely recognised that key stakeholders and council departments will have a key role to play in the funding and delivery of all necessary infrastructure. Opportunities will also emerge over time to bid for public sector funding for infrastructure, and it is anticipated that investment in infrastructure to facilitate growth is likely to feature heavily in future strategies to enable recovery from the COVID-19 economic impacts. Ultimately, a combination of funding mechanisms will be used to deliver new and improved infrastructure.

A primary potential source of the funding requirement could be from developers and landowners through legal agreements accompanying the grant of planning permission. The Partial Update of the Core Strategy will identify infrastructure requirements and new development will be expected to address related infrastructure needs to ensure that all necessary infrastructure is delivered or funding provided prior to enable its provision by others. Such developer contributions may be secured through the use of Section 106 Agreements to provide infrastructure related to specific sites and proposals. Alongside site specific Section 106 contributions, Rotherham Metropolitan Borough Council can also use the Community Infrastructure Levy to secure broader contributions towards infrastructure from a wide range of types of development activity.

Going Forward

This refreshed IDS and supporting infrastructure schedule represent the infrastructure capacity and needs in Rotherham as of late 2020.

A wide range of lead agencies will be involved in the planning and delivery of future infrastructure. This study identifies a list of infrastructure projects that are critical to delivery of future growth and will assist the Council and other stakeholders to understand and prioritise allocation of resources, prepare related service delivery and investment plans and support future bids for funding.

The information in the schedule will need to be monitored, reviewed and updated as necessary through the process of considering the Partial Update of the Core Strategy and beyond. Additional infrastructure not mentioned in this 2020 IDS may be required to enable development as a result of potential changes to plans/strategies or priorities provided by infrastructure providers.

The schedule of infrastructure requirements should therefore be treated as “live” to be updated regularly as more information becomes available. Data on infrastructure requirements has been produced in a format that can be easily monitored and updated over time. This will also help to provide a basis for the annual Infrastructure Delivery Statement.

Therefore, finally it is also recommended that continued engagement with key stakeholders is facilitated, potentially through the establishment of a stakeholder forum.

1 Introduction

1.1 Background

Hyas Associates, Richard Wood Associates and Fore Consulting were commissioned by Rotherham Metropolitan Borough Council (RMBC) to assist in updating the infrastructure evidence base to support the Rotherham Local Plan Core Strategy Partial Update.

The Local Plan aims to promote sustainable development and is used to make planning decisions and decide planning applications. It consists of several documents, including the Local Plan Core Strategy which was adopted in 2014 and covers the period 2013 – 2028. The Core Strategy 2014 sets out the spatial strategy for the whole Borough and identifies the broad locations for delivering new housing, employment and other development. It sets out how much new development is needed, where it should go and when it should happen. Strategic policies and the required new infrastructure to make this happen are also included. A Sites and Policies Document was also adopted in 2018.

The Council is currently taking forward a partial update of the Core Strategy 2014, including an up-to-date assessment of housing requirements over the plan period. The recently adopted Local Development Scheme identifies that the Core Strategy Partial Update is expected to cover the period 2025 to 2040. Policies relating to housing, flood risk and water management, climate change and carbon reduction, and the presumption in favour of sustainable development are being updated, along with the infrastructure requirements to support new growth.

The Council's existing Infrastructure Delivery Study (2012 IDS) is considered to be robust in terms of methodology but requires infrastructure details and analysis to be brought up to date particularly through engagement with infrastructure providers and key stakeholders. This update to the 2012 IDS will ensure that the Council has an up-to-date evidence base and relevant information to inform decision making. The 2020 IDS is part of the evidence base and informs the Core Strategy Update. It addresses the following requirements to:

- Establish up to date key contacts for infrastructure and service providers;
- Capture existing infrastructure capacity and identify shortfalls with providers;
- Set out what infrastructure is required to support envisaged growth in different settlements/urban areas, including infrastructure critical to the delivery of planned growth;
- Identify who will provide the new infrastructure required, when is it required and how much will it cost;

- Look at public and private funding opportunities and through the development process, identifying any barriers to funding and delivery; and

- Summarise key information in the form of an Infrastructure Delivery Schedule.

1.2 National Policy Requirements

The Government's revised **National Planning Policy Framework (NPPF)** was updated in June 2019. Infrastructure is an important thread throughout the document, for both plan making and determining planning applications. The NPPF sets out that the purpose of the planning system is to contribute to the achievement of sustainable development. This involves meeting the needs of the present without compromising the ability of future generations to meet their own needs. Infrastructure is an important component in meeting the economic, social and environmental objectives of sustainable development and reflecting the character, needs and opportunities of an area.

The NPPF requires that strategic policies in plans should make sufficient provision for 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) and community facilities (such as health, education and cultural infrastructure). Infrastructure providers are identified as relevant bodies in the NPPF. Effective and on-going joint working between strategic policy-making authorities and relevant bodies is integral to the production of a positively prepared and justified strategy. The provision of infrastructure and community facilities at a local level can also be addressed by non-strategic policies. Infrastructure planning also forms an important means for local planning authorities to maintain effective cooperation under the duty to cooperate with each other, and with other prescribed bodies.

The NPPF highlights how the preparation and review of all policies should be underpinned by relevant and up-to-date evidence. This study is an important part of this approach to help ensure that the Core strategy Partial Update is sound and found to be robust at Examination. Infrastructure has a key influence on the supply and delivery of new homes, business investment and expansion, healthy and inclusive communities, sustainable transport, communications, and planning for climate change and resilience. In summary national policy clearly states that it is the responsibility of local planning authorities to plan positively for the provision of infrastructure.

The **Planning Practice Guidance** provides detailed guidance for the requirements set out in the NPPF. Paragraph: 058 Reference ID: 61-058-20190315 (Revision date: 15 03 2019) addresses "How can the strategic policy-making authority demonstrate that a plan is capable of delivering strategic matters, including the provision for housing and infrastructure?". Careful attention should be paid to providing an adequate supply of land, identifying what infrastructure is required and how it can be funded and brought

forward. Working alongside infrastructure providers, service delivery organisations, other strategic bodies such as Local Enterprise Partnerships, developers, landowners, and site promoters this should be done at an early stage in the plan-making process. A collaborative approach is expected to be taken to identifying infrastructure deficits and requirements, and opportunities for addressing them. The PPG sets out the need to:

- Assess 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.

In preparing a plan, strategic policy-making authorities should use available evidence of infrastructure requirements to prepare an **Infrastructure Funding Statement**. This will include the anticipated funding from developer contributions, and the choices local authorities have made about how these contributions will be used. At examination this can be used to demonstrate the delivery of infrastructure throughout the plan-period. The requirements of an annual funding statement are set out in the Community Infrastructure Levy (Amendment) (England) (No. 2) Regulations 2019. PPG Paragraph: 015 Reference ID: 61-015-20190315 (Revision date: 15 03 2019) also highlights that effective cooperation should enable strategic policy-making authorities and infrastructure providers to establish whether additional strategic cross-boundary infrastructure is required.

1.3 Role of Infrastructure

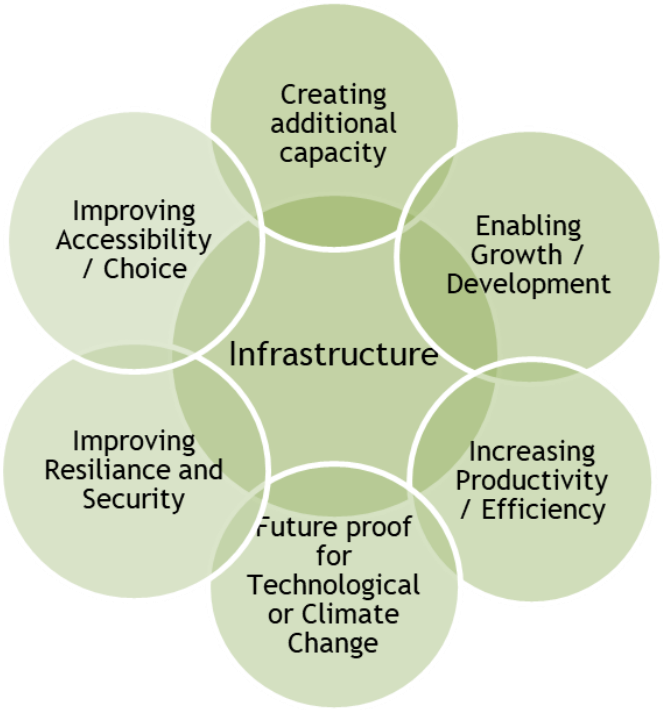
As highlighted in the NPPF a range of different types of infrastructure play a key role in achieving economic, social and environmental objectives. Infrastructure is important for the sustainable growth of the Borough and wider City Region - and in supporting thriving neighbourhoods and successful places. The importance of infrastructure to the delivery of development sites and the overall achievement of sustainable development is promoted in the NPPF.

Infrastructure planning will always be subject to change due to the influence of wider societal and economic impacts, and as such should be an ongoing ‘live’ process. For example, the COVID-19 pandemic has provided an illustration of the increasing importance of active travel and travel choices, and access to public and private green and blue spaces in and around our built-up areas. Infrastructure provision continues to play a critical role in rethinking urban planning and in achieving better health and well-being.

The council declared a climate emergency in October 2019 and a draft policy document "Rotherham Council Responding to the Climate Emergency" has since been produced. In June 2020 the following dual targets were agreed – the Council's carbon emissions to be at net zero by 2030 and Borough-wide carbon emissions to be at net zero by 2040. Infrastructure will play a key role in achieving these targets and as a critical component of climate change adaptation and mitigation. This will be important to minimise the threat to livelihoods and growth across Rotherham from effects such as flooding and other extreme weather variations. The ending of the sale of new petrol and diesel cars and vans from 2030, the phasing out of gas boilers from 2023, and other Future Homes Standard requirements for low carbon heating and energy efficiency will amongst many other measures influence future infrastructure provision.

Technologically advanced, sustainable and resilient infrastructure is seen as important for paving the way for an inclusive post-COVID 19 economic recovery – the role of investment in infrastructure has had longstanding recognition for giving an immediate lift to economies. Economic recovery and renewal are critical for the future success of the borough. The Council is committed to working with local businesses, the city region and national government to ensure that Rotherham gets the investment it needs to support and build the local economy and maximise social value.

Figure 1: Different Roles of Infrastructure



1.4 Format of the Report

Following a review of national and local planning guidance, together with an overview of other recent local authority approaches to Infrastructure Delivery Studies, this report sets out the findings of the work undertaken during the latter half of 2020 to update the 2012 IDS, and covers the following elements in turn:

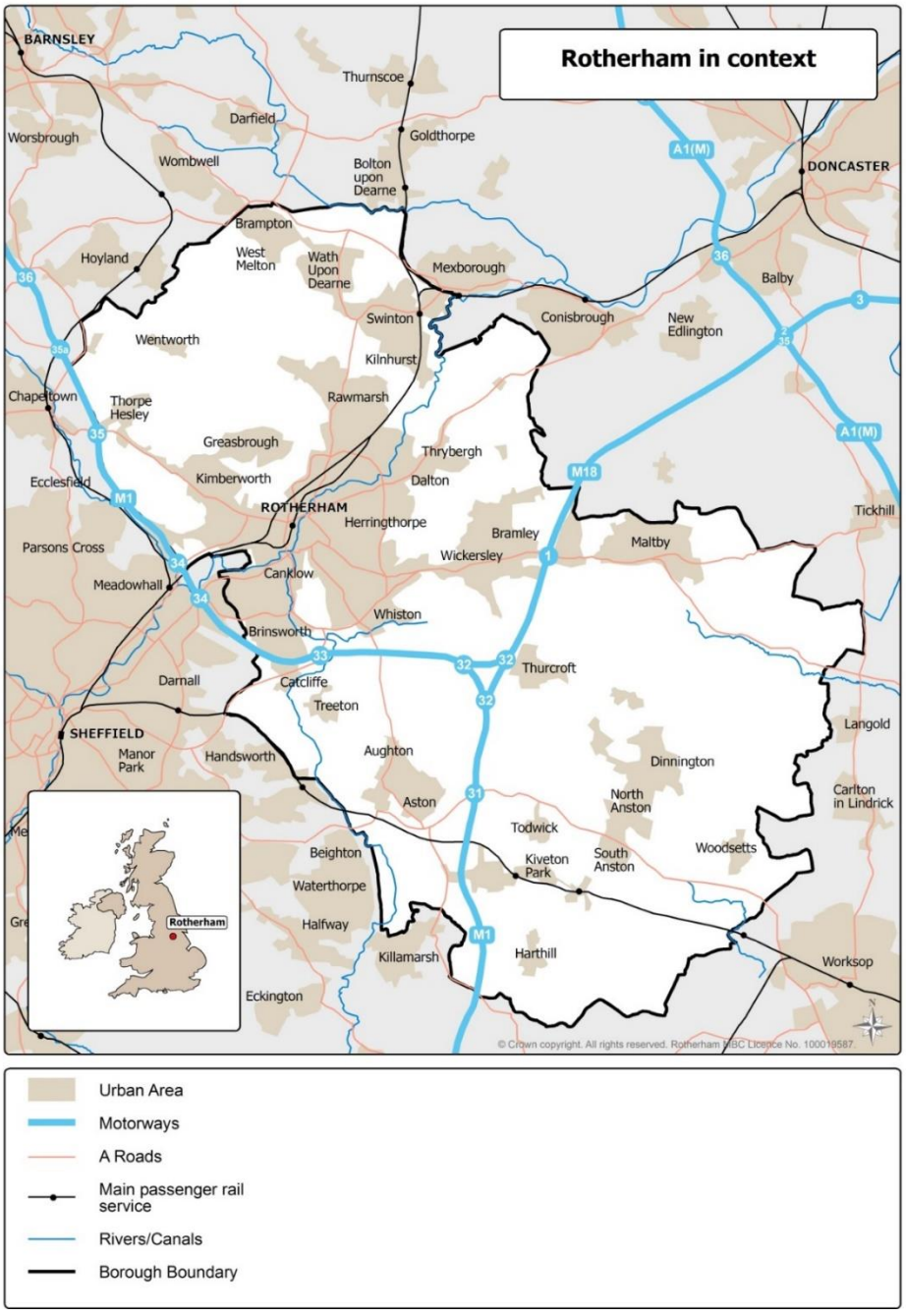
- Consideration of the likely changes within the Core Strategy Partial Update and how stakeholders helped review and build the revised evidence base (Section 2);
- Identification by infrastructure category and type of the infrastructure provision required to deliver two potential growth scenarios for the Core Strategy Partial Update, based on existing infrastructure capacity and current deficits (Section 3);
- Implications of this required infrastructure to the delivery of the planned growth envisaged in the Local Plan, including cross boundary schemes (Section 4); and
- Consideration of delivery and funding sources for the identified infrastructure (Section 5).

Finally, the report sets out an overview of infrastructure costs and critical infrastructure for delivering the development scenarios (section 6). It concludes with some key next steps and suggestions as to how the 2020 IDS itself could be used as a better interactive tool to track the delivery of the required infrastructure in Rotherham over the new Local Plan period and to inform the annual Infrastructure Funding Statement and Sheffield City Region growth packages.

2 Development Scenarios for the 2020 IDS

The Metropolitan Borough of Rotherham occupies an area of 28,653 hectares, with more than half of the Borough being rural, characterised by attractive villages and rolling countryside. Rotherham is bounded by Sheffield to the west, Barnsley to the north, Doncaster to the east and North East Derbyshire and Bassetlaw in the south.

Figure 2: Rotherham in Context



The Borough falls within the defined Sheffield City Region (SCR) boundary. The M1 motorway runs along much of the Borough's western edge and the M18 bisects the Borough to the south of Rotherham town centre. The population is now in excess of a quarter of a million. The 2018-based sub-national population projections for England estimate is that this will rise to 288,593 by 2043. Sheffield is a major source of employment opportunities and Rotherham has by far the highest rate of commuting flows in South Yorkshire due to its central location and proximity to Sheffield.

2.1 Anticipated Future Growth Levels

The previous 2012 IDS (Peter Brett Associates) analysed the infrastructure that would be required to support implementation of the Local Plan's Core Strategy 2014. At that time the Local Plan was proposing a target of 12,750 new homes over the Plan's 15-year plan period. The Core Strategy is now adopted with a raised target of 14,371 new homes. The Core Strategy also has an employment land target of 235 hectares.

For the purposes of this 2020 IDS, and to inform the development of the Core Strategy Partial Update, two potential future housing growth/development scenarios have been established by RMBC. These are further explained in the tables at Appendix A which also show the number of dwellings under construction as of 2019 and additional dwellings expected to be constructed to 2025. Development Scenarios 1 and 2 then present two options for growth over the proposed new Local Plan period of 2025 – 2040. These are indicative and could change in light of future evidence and consultation:

- **Scenario 1** uses the current Local Housing Need calculation (as of 2020) for the period 2025 – 2040. This would require an additional 8,832 dwellings to 2040. Settlements have been identified by RMBC where additional sites/land may be required beyond the existing Local Plan housing allocations.

- **Scenario 2** uses the remaining capacity of Local Plan allocations at 2019, plus the capacity of all safeguarded land sites which could come forward following an update of the Sites and Policies document (safeguarded land has been removed from the Green Belt but will require a review of the Local Plan in order to be allocated and developed). The use of safeguarded land would negate the need for additional sites/land. This would enable an additional 14,203 dwellings to be delivered to 2040.

A significant amount of land remains allocated for employment use. Further work will be undertaken to analyse employment data. However, in view of the remaining land available it is considered at present that the current allocations will be sufficient to meet needs to 2040. As such no further scenarios have been developed. A table is also attached showing the remaining capacity (in hectares) of allocated employment sites by main settlements in the Borough.

Table 1: Scale of Growth - Summary Points

Core Strategy - for the period 2013-2028 • 14,371 homes & 235 hectares of employment land
Current Position • Housing commitments to 2025, under construction/expected • Employment land looks to be sufficient to 2040
Scenario 1 (Housing) • Additional 8,800 dwellings to 2040 • 20,700 additional residents/customers • Requires new allocations
Scenario 2 (Housing) • Additional 14,203 dwellings to 2040 • 33,500 additional residents/customers • Uses existing allocations & all existing safeguarded land

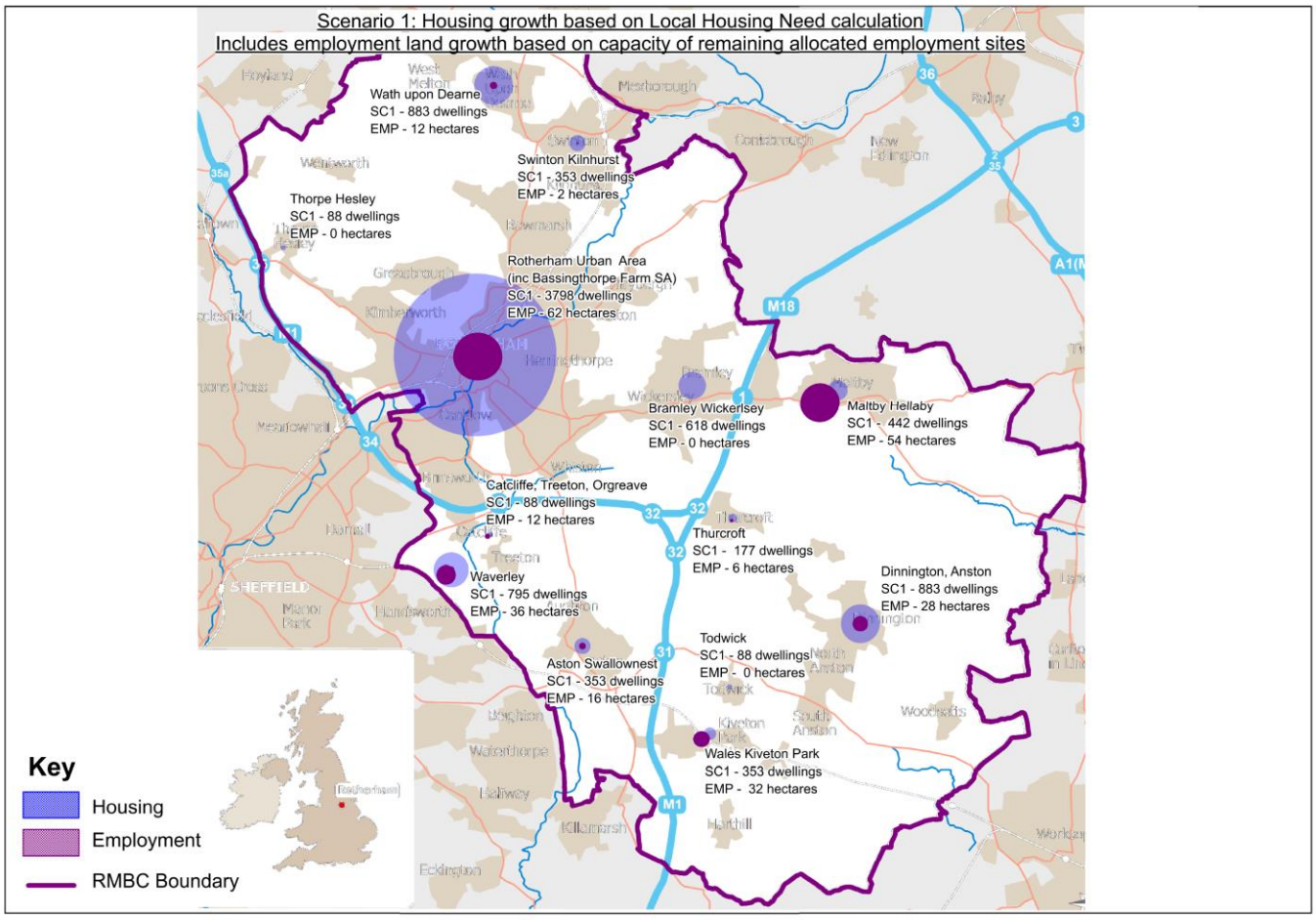
2.2 Location of Growth

As shown on Figure 2, the main focus of growth under **Development Scenario 1** is the Rotherham Urban Area (3,800 dwellings). This includes Bassingthorpe Farm Strategic Allocation (providing c2,400 new dwellings in the 2025 - 2040 plan period,11 ha of employment land, a primary school, local centre with green and social infrastructure). The continuing build-out at Waverley Strategic site, plus development at Wath upon Dearne, Dinnington/Anston, Bramley/Wickersley and Maltby/Hellaby would also play a key role in accommodating future growth, potentially accounting for 400 to 900 dwellings each.

Under Development Scenario 1, the majority of growth can be met on existing housing allocations, although additional land is expected to be required in a limited number of settlements; the largest requirements being in Swinton & Kilnhurst (250 dwellings) and Thurcroft (140 dwellings), along with Thorpe Hesley and non-Green Belt villages.

The additional land could in some cases be met, or partly met, through the release of safeguarded land; however additional land release would also be required. This could be through development on land allocated for other uses at present, or if necessary, the Council may need to consider additional Green Belt land releases in future.

Figure 3: Potential Growth Locations in Scenario 1

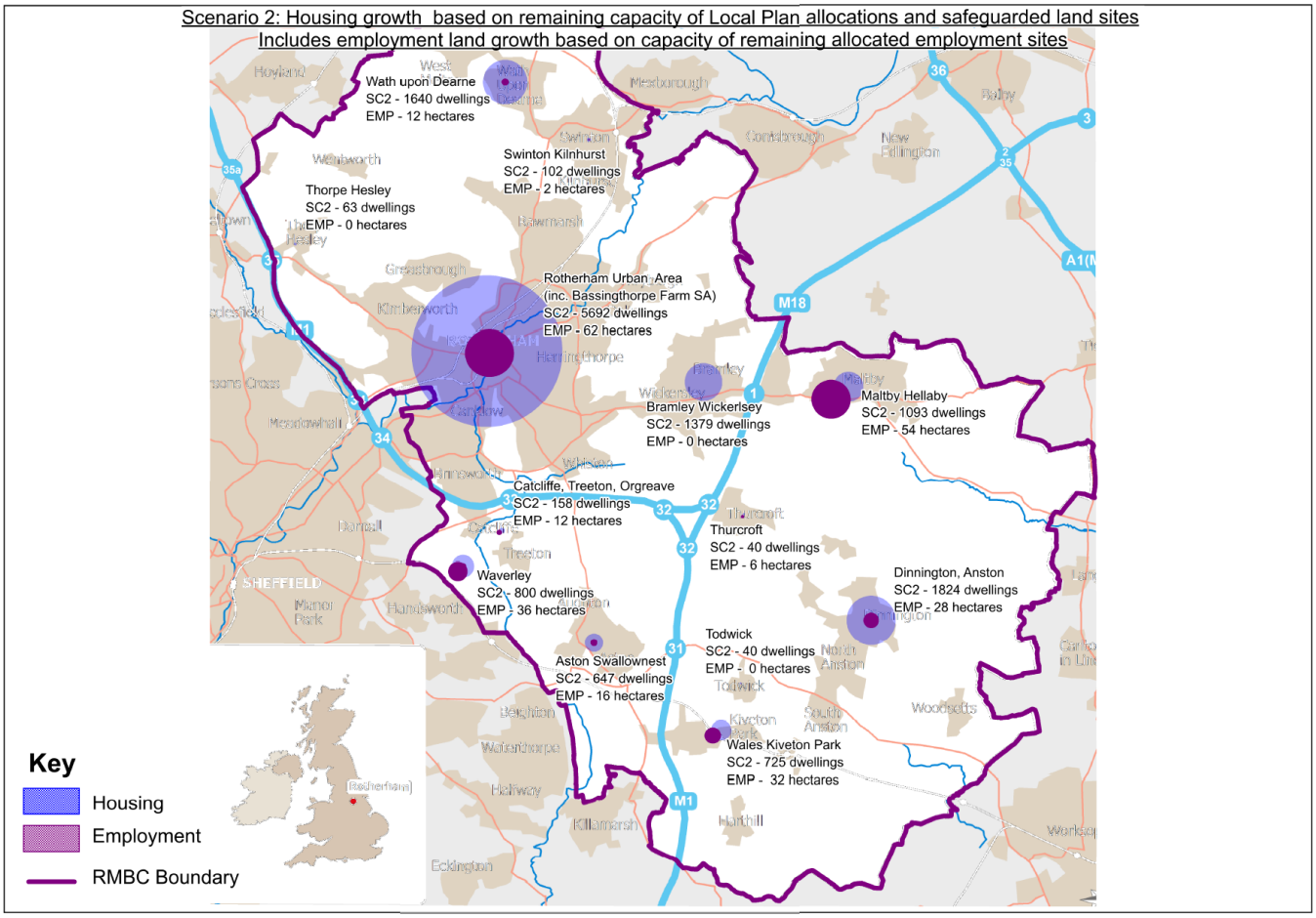


Under **Development Scenario 2,** the Rotherham Urban Area remains the main focus of growth. Similarly, Wath upon Dearne, Dinnington/Anston, Waverley, Bramley/ Wickersley and Maltby/ Hellaby all remain a future development focus. As this approach is based on the capacity of existing allocations and safeguarded land, no additional Green Belt release would be required.

Development Scenario 2 would deliver higher overall growth - approximately an additional 5,400 dwellings between 2025 and 2040 compared to Scenario 1. The Rotherham Urban Area shows the greatest difference – with almost 1,900 additional dwellings. Five settlements groupings would also see additional growth of between 450 and 1,000 dwellings each, in comparison to Development Scenario1: Wales and Kiveton Park; Maltby & Hellaby; Bramley, Wickersley and Ravenfield Common; Wath-upon-Dearne, Brampton Bierlow and West Melton; and Dinnington, Anston and Laughton Common.

Two settlements show lower growth of 100 to 250 dwellings under the second scenario – Thurcroft and Swinton & Kilnhurst.

Figure 4: Potential Growth Locations in Scenario 2



2.3 Stakeholder Engagement

Contacts established with a wide range of infrastructure and service providers through development of the previous 2012 IDS provided a starting point for the more recent stakeholder engagement in this commission.

During the preparation of the 2020 IDS, the project team contacted those organisations with responsibility for the following infrastructure and services:

- Local highways;
- Strategic highways;
- Public transport (rail and bus facilities and services);
- Active travel (cycling and walking);

- Education (nursery, primary and secondary schools and Special educational needs and disabilities (SEND));
- Health and social care services and facilities (primary, secondary, tertiary and community care);
- Gas transmission and distribution;
- Electricity transmission and distribution;
- Telecommunications;
- Water supply, sewerage and waste water treatment;
- Flood protection;
- Waste and recycling facilities;
- Emergency services;
- Indoor sport and leisure facilities; and
- Community facilities (libraries, cemeteries and public conveniences).

Each of the providers was sent a pro-forma, in which relevant extracts from the previous IDP 2012 were included, and providers were asked to review and provide comments on the information, in particular on whether the description set out is still correct or if it needs updating or adding to in any way.

Further questions were also set out which aimed to establish the infrastructure availability and capacity issues that the providers felt would be key considerations for the Core Strategy Partial Update and to highlight key planned investments and improvements. A summary of the development scenarios was included, along with the summary tables set out at Appendix A. In particular, organisations were asked to provide any available:

- Summary/overview maps of existing and planned facilities and/or networks;
- Catchment area maps; and
- Current investment plans or capital programmes.

As part of the proforma stakeholders were also asked to consider implications for their services and facilities as a result of the COVID-19 pandemic, and to share how their forward planning responded to the Council's Climate Change declaration.

Information received via the returned pro-formas helped to populate the first iteration of the new interactive Infrastructure schedule.

The organisations were then invited to a series of workshops in October 2020. These workshops were held online over two days due to the COVID-19 pandemic. Themes for the workshops were as follows:

- Community;
- Education;
- Emergency services;
- Health;
- Transport;
- Flooding and water; and
- Utilities.

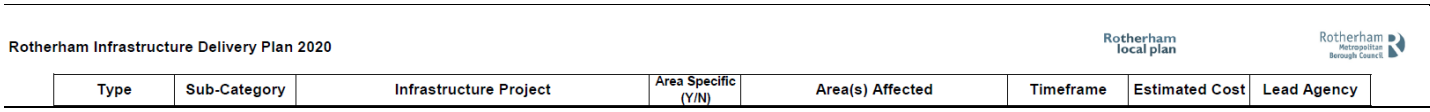
The introduction to each of the workshops explained the background to the Core Strategy Partial Update and provided an indication of the main changes from the current Local Plan as described previously for the two development scenarios. Attendees were also shown copies of Figures 2 and 3 to explain and show the suggested locations for accommodating future housing and employment growth.

The workshops provided an opportunity for the organisations to ask questions of the project team and Council Officers, and for all parties to discuss and 'join up' the issues being raised by different infrastructure providers and explore the emerging issues and implications for the Core Strategy Partial Update. During the workshops the Attendees were asked to view the emerging Infrastructure schedule, and to confirm that the contents aligned with their own delivery plans.

As such, this 2020 IDS and supporting infrastructure schedule represent the infrastructure capacity and needs in Rotherham as of Autumn 2020, and should be reviewed and updated as necessary through the Local Plan review process and as the Local Plan 2040 itself is delivered. Updated annually the Schedule can also be used to inform the drafting of the Infrastructure Funding Statement each year.

3 Infrastructure Commentaries

The stakeholder engagement exercise, and the associated infrastructure plans and information provided, forms the main basis for preparing the 2020 IDS. The focus of this study is the development of an infrastructure delivery schedule which is included at Appendix B. The format and headings of the schedule is highlighted below.


Rotherham Infrastructure Delivery Plan 2020

Type	Sub-Category	Infrastructure Project	Area Specific (Y/N)	Area(s) Affected	Timeframe	Estimated Cost	Lead Agency

A plan of key interventions has also been produced based on the schedule and is included at Appendix C. This section of the report provides an overview of the different forms of infrastructure examined through this 2020 IDS and summarises the information included in the 2020 Infrastructure Delivery Schedule at Appendix B. The commentaries set out below are grouped under the following eight category headings:

- Transport;
- Utilities;
- Education;
- Health;
- Waste;
- Blue and Green Infrastructure;
- Community Facilities; and
- Emergency Services.

3.1 Transport

3.1.1 Highways

The trunk roads that make up the Strategic Road Network (SRN) are generally managed and maintained by Highways England, which is an executive agency of the Department for Transport. The M1 and M18 motorways are the only roads within the Borough that are part of the SRN, but Rotherham is ideally placed for excellent access to the SRN with access points within the Borough at Junctions 31, 33, 34 and 35 of the

M1 in the south and west and at Junction 1 of the M18 to the east. The A1(M) is just outside the Borough and also provides important links to the Borough.

The M1 within the Borough has recently been upgraded to an all-lane running smart motorway and there is a committed scheme to widen the A630 Parkway to provide a third lane in both directions between the Catcliffe interchange and M1 Junction 33, as well as changes to the roundabout at the motorway junction itself. The aim is to reduce congestion and improve journey times between the Catcliffe interchange, the Advanced Manufacturing Park and M1 Junction 33 and the scheme will also reduce $C0^2$ emissions.

Even with these improvements, Highways England's latest Route Strategy notes the following challenge for this part of the SRN:

"Congestion and safety on the M1 between Junctions 32 and 34 which is constraining economic development"

Sheffield City Council is currently leading on the development of a Large Local Major Transport Scheme, the SCR Innovation Corridor, that will provide a stronger link between the Advanced Manufacturing Innovation District and Sheffield. The preferred option, an east-west link to the south of the M1, is currently being modelled and assessed. The project will aim to deliver a highway scheme which will relieve the area from traffic congestion, facilitate better public transport links to and from this area and reduce the reliance on car trips. M18 Junction 1 has also seen capacity improvements since the IDP 2012, and although evidence provided at that time suggests that the levels of growth anticipated in the existing Local Plan would not require significant further improvements, additional growth, concentrated to the east of the Borough, may require this conclusion to be revisited. However, this analysis should also reflect any changes to future demand forecasts arising from the COVID-19 pandemic, with latest Government forecasts suggesting a much slower rate of growth in background traffic in the first half of the 2020s.

The local highway network within the Borough is centred on Rotherham town centre. There an inner ring road with radial routes leading to:

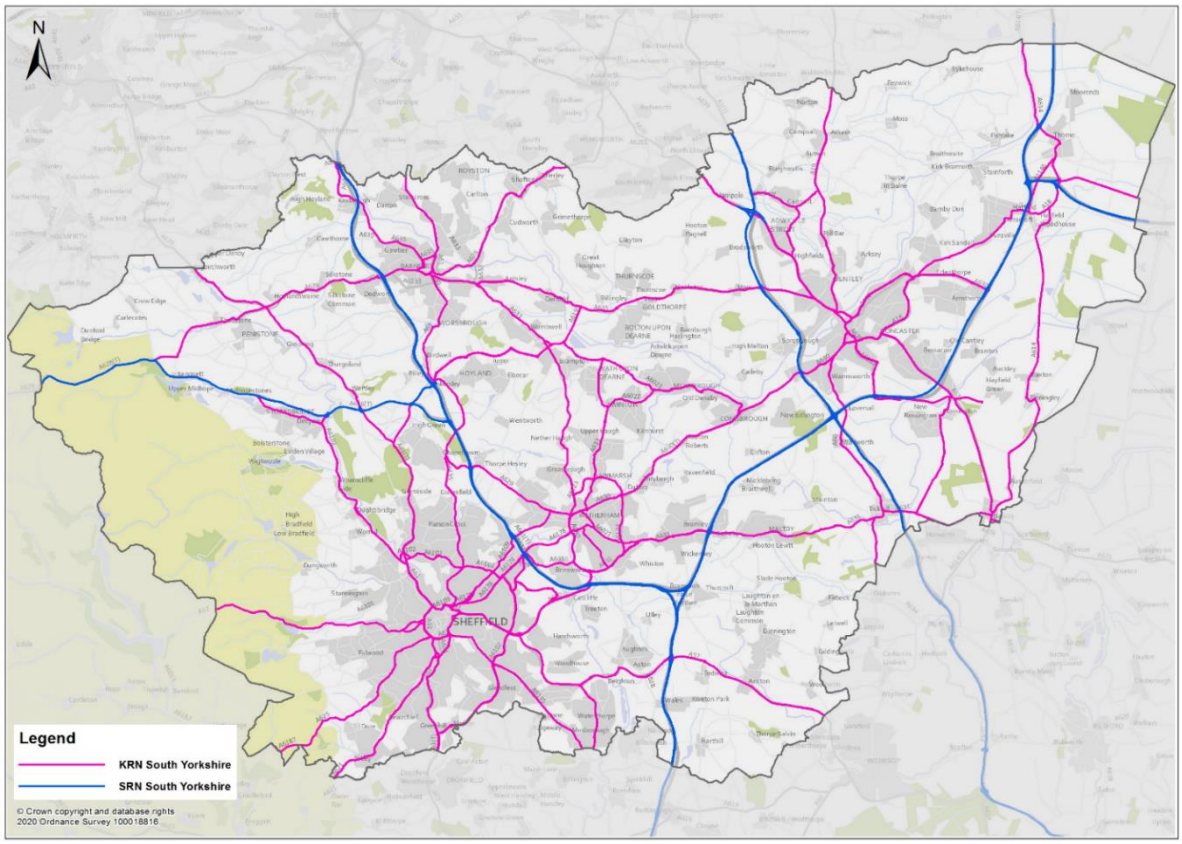
- Sheffield in the west via the A6178;
- Doncaster and the A1(M) in the east via the A630;
- Sheffield, Waverley and M1 South in the south west via the A630;
- Dearne Valley in the north via the A633; and
- Huddersfield, Leeds and M1 North in the north west via the A629.

There are local areas of delay and congestion, particularly in Rotherham town centre where the network is constrained by the railway bridges, which pose real obstacles to increasing road capacity even by a modest amount.

The routes and junctions that experience the greatest delay during parts of the day compared to free flow conditions include the A57 around South Anston (with the growth of employment and housing in the Worksop area further increasing the impact on the existing pinch points), A6123 Aldwarke Lane, Inner Ring Road (particularly Ickles Roundabout), A631 West Bawtry Road towards Rotherway, Manvers Way (with existing congestion impacting on the growth potential of the employment and housing in the Dearne Valley), the A633 corridor and the A6178 towards Sheffield.

Within the SCR, the recently agreed Devolution Deal provides the Mayor an opportunity to collaboratively manage a Key Route Network (KRN), as shown in Figure 5. Whilst the four Local Authorities within SCR currently work together on cross boundary issues, developing a KRN for the SCR could enable a more integrated approach to the management of the road network and could be used to plan and identify investment priorities in the future.

Figure 5: Initial SCR Key Route Network



The committed improvements to the A630 Parkway were highlighted previously, but other locations where improvements are likely to be needed to support future growth include:

- A6123 Stag Roundabout;
- St Annes Roundabout;
- A631 junction improvements and route treatments (Worrygoose, Brecks and Wickersley); and
- Coach Road and The Whins on the Greasborough corridor

All of these are located on the initial KRN described above.

Improvements may also be needed in the future on the A57 around South Anston and at the Red Lion Roundabout, although these are primarily a result of housing growth outside the Borough. Issues to be addressed have also been identified in specific locations such as Swinton, Kiveton Park and Dinnington, as well as the need for localised improvements associated with the Bassingthorpe Farm strategic site.

3.1.2 Public Transport

There are four railway stations within the Borough of Rotherham - Rotherham Central, Kiveton Bridge, Kiveton Park and Swinton – served by two primary rail lines.

The first serves Rotherham Central and Swinton and has services running between Doncaster and Sheffield and also Leeds and Sheffield, with three trains per hour during the day in each direction, providing connections to main line services at Sheffield and Doncaster. The stations at Kiveton Bridge and Kiveton Park are served by an hourly service during the day linking Sheffield to Retford (with main line connections) and Lincoln.

The key constraints on increasing the frequency of rail services for Rotherham in the past was the section of single track at Holmes Chord and the many flat junctions around Swinton. The introduction of the tram-train service in 2018 via the new Tinsley Chord linking the Sheffield Supertram system with the national rail network, and serving Rotherham Central station and Parkgate shopping centre, has seen a step change in the frequency of services between Rotherham and Sheffield. A new tram-train stop at Magna is planned to help improve public transport connections between Rotherham and Sheffield, however, many of the junctions on the rail network across the SCR are not flyovers, which restricts the number of trains that can be run on the network – this is a particular problem around Swinton.

Given the relatively low level of existing rail patronage due to the COVID-19 pandemic, the existing rail network can perform reasonably well, although if pre-COVID-19 patronage projections are realised there will be a requirement for more lengthening of trains and selective platform extensions to meet future requirements across the local rail network.

Future improvements advocated by both SCR and Transport for the North (TfN) include an extension of the tram-train service through Swinton to Doncaster, which would release capacity for Northern Powerhouse Rail (NPR) services at Sheffield. The NPR proposals for the Sheffield to Leeds corridor also include the provision of a new or re-opened station on the main line at Rotherham. South Yorkshire Passenger Transport Executive (SYPTE) continues to examine the potential for a new station to serve the Waverley New Community and the Advanced Manufacturing Park as well as promoting the renewal of the existing Supertram network.

Bus services are generally provided on a commercial basis by private bus operators. The routes and timetables for the commercial services are determined by the operator and will therefore largely respond to future demand. As new sites come forward developer contributions will typically fund new or extended bus routes and associated infrastructure to serve the sites.

Rotherham's bus network is focused around Rotherham Interchange and generally follows the radial highway network described previously, as shown in Figure 6.

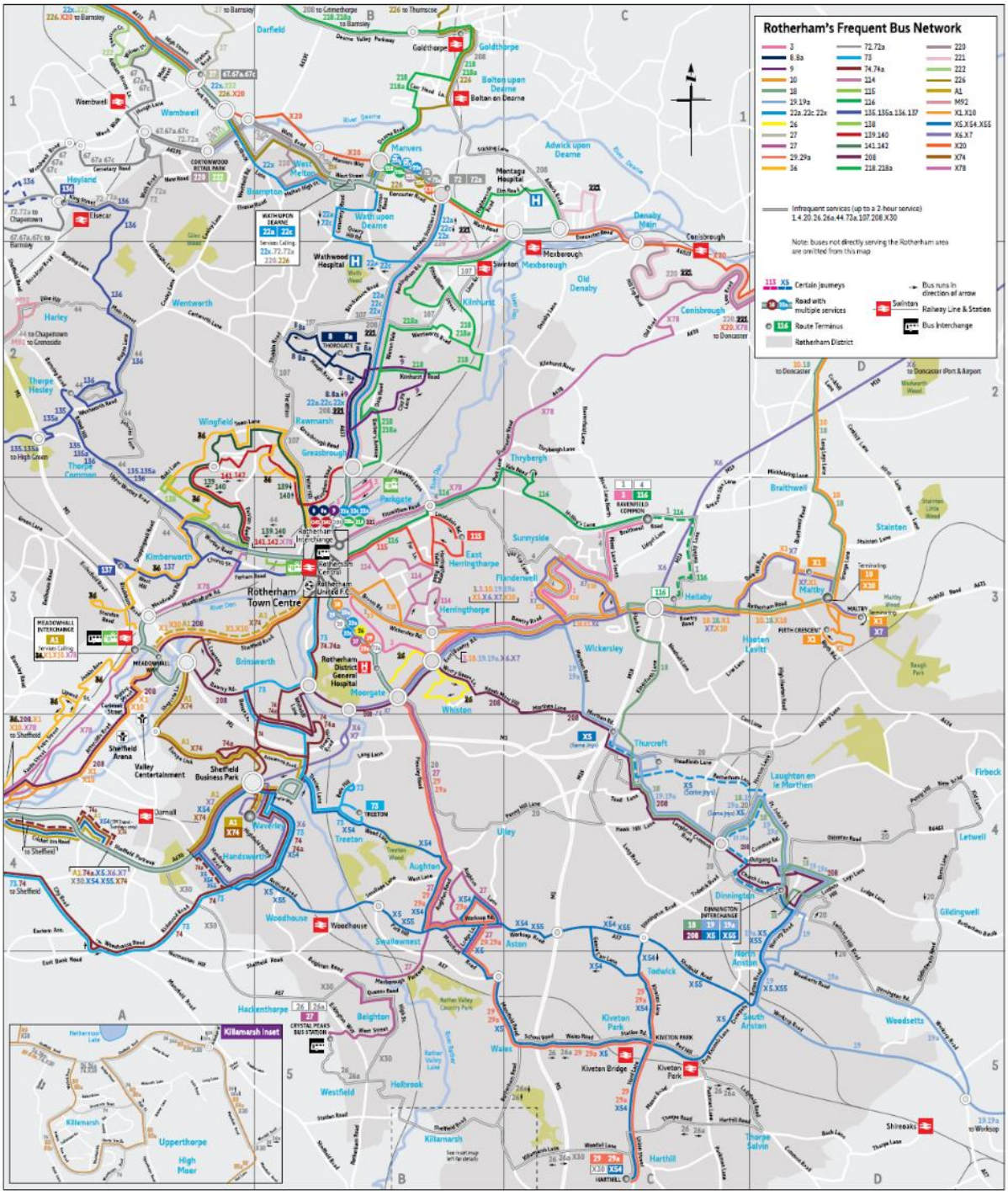
The main points of delay on the network broadly coincide with the pinch points on the local highway network described previously. The SCR's current Transforming Cities Fund (TCF) programme has a number of schemes included within it intended to enhance bus priority in the short term at the locations where delay is currently greatest, particularly around Parkgate, but further holistic improvements will be required on a number of corridors in order to encourage greater use of public transport as growth takes place.

As this time, two particular corridors have been identified to support the growth predicted in the future year scenarios:

- Rotherham to Dearne Valley; and
- Rotherham to Maltby.

Both of these corridors have some measures included within the TCF programme, but more will be needed in the future, and the network indicates that these are the two radial corridors with the greatest density of bus services.

Figure 6: Rotherham's Frequent Bus Network



3.1.3 Active Travel

Following the development of a draft Local Cycling and Walking Infrastructure Plan (LCWIP) and the increase in cycling through the COVID-19 pandemic, investment in active travel modes has been given increasing importance across Rotherham over start of the current Local Plan period. This has focused around the significant areas of growth, with internal site layouts responding to the needs and promotion of, active modes, and with connections enhanced to existing facilities.

The Rights of Way Improvement Plan 2 (ROWIP) covers the period 2019 – 2024 and sets out how RMBC will develop, promote and protect a Borough-wide network of rights of way that meet the present and likely future needs of the public for the purposes of open-air recreation, exercise and access to local services[1].

Both of these documents have informed the schemes within the Borough included within the SCR's TCF programme which will see significant investment in active travel facilities across the Borough by 2023. As part of the TCF programme, active travel improvements have already been implemented with a new direct cycle route linking Greasbrough, Kimberworth and Wingfield to Rotherham town centre, as well as providing an early phase of a sustainable transport link to the Bassingthorpe Farm housing development.

Within the town centre, there are proposals for a new footbridge at Forge Island and the creation of a cycling 'box' within the town centre.

SCR has also recently published an Active Travel Implementation Plan that includes a network of active travel routes that it wishes to see developed over the next 10-15 years. Learning from the development of the TCF programme and with a mind to the SCR's plans, RMBC is looking to develop further packages of active travel improvements on holistic corridor-wide basis as growth takes place, in particular covering:

- Rotherham to Wickersley;
- Rotherham to Whiston;
- Rotherham to Thrybergh;
- Rotherham to Thorpe Hesley;
- Rotherham to Greasborough;

[1] https://www.rotherham.gov.uk/downloads/file/380/rights-of-way-improvement-plan

- Rotherham to AMID;
- Dearne Valley;
- Maltby to Hellaby; and
- There is also an identified need to develop further cycle connections to, from and within, the Bassingthorpe Farm strategic site.

3.2 Utilities

Electricity, gas and water supply are regulated industries, and each provider has a duty to connect future developments to their network as they are built, subject to cost and timing within the scope of its asset management plan, where applicable, and regulations laid down by Ofgem.

Each provider has a five-year investment programme of maintenance and expansion, and so it is often difficult to engage with utility providers around the Local Plan process given the much longer timescale and the uncertainty over specific sites coming forward.

However, as part of this 2020 IDS, discussions have been held with the main utility companies including National Grid, Northern Powergrid, Cadent Gas, Yorkshire Water and Severn Trent Water about the potential scale and location of new residential development envisaged as part of the Core Strategy Partial Update, particularly in the early part of the Local Plan period and to understand any changes to their investment programmes since 2012.

3.2.1 Gas

National Grid Gas plc (NGG) owns and operates the high-pressure gas transmission system across the UK. In the UK, gas leaves the transmission system and enters the UK's four gas distribution networks where pressure is reduced for public use. National Grid is responsible for the management of adopted infrastructure and the emergency response to non-adopted infrastructure - all other asset responsibilities, including management of third-party gas distribution pipelines, lie with other utility infrastructure providers. National Grid Ventures (NGV) is separate from National Grid's core regulated businesses. NGV develop, operate and invest in energy projects, technologies, and partnerships to help accelerate the development of a clean energy future for consumers across the UK, Europe and the United States.

New gas transmission infrastructure developments (for example pipelines and associated installations) are periodically required to meet increases in regional demand and changes in patterns of supply. Developments to the network occur as a

result of specific connection requests, for example power stations, and requests for additional capacity on the network from gas shippers.

The 2019 Gas Ten Year Statement provides an update on current and future changes that impact the gas national transmission system[2]

National Grid's most up to date business plan covers the 2021-2026 regulatory period (RII0-2) and sets out how it will invest in its services and network as well as how it will help to deliver the UK's net zero carbon target[3]

Cadent Gas is the gas distribution network operator (DNO) for the Rotherham area and the map overleaf shows the planned length of the gas network in Rotherham for which works are planned as part of their current gas mains replacement programme.

The current Cadent Gas business plan also covers the RII0-2 regulatory period from 2021 to 2026[4]:

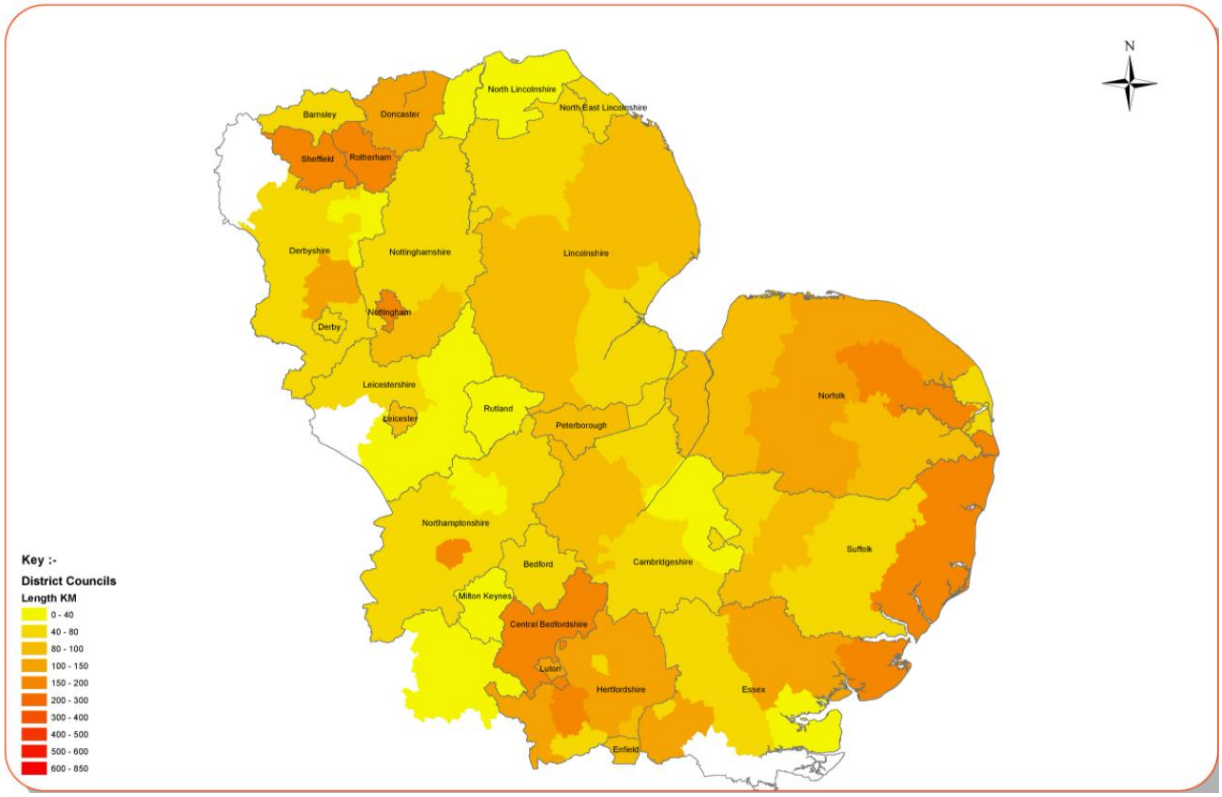
The plan is light on specific detail, but Cadent Gas has undertaken a high-level assessment of the potential impact of the likely growth in Rotherham on the local gas network.

[2] https://www.nationalgridgas.com/document/128886/download

[3] https://www.nationalgrid.com/uk/gas-transmission/document/129016/download

[4] https://cadentgas.com/nggdwsdev/media/Downloads/businessplan/Cadent_BusPlan_PART3_Full-Plan_NC.pdf

Figure 7: Planned Cadent Gas Network Improvements



Source: https://cadentgas.com/nggdwsdev/media/media/reports/futureofgas/Appendix-B-East-of-England-network-overall.jpg

3.2.2 Electricity

National Grid Electricity Transmission plc (NGET) owns and maintains the electricity transmission system in England and Wales. The energy is then distributed to the electricity distribution network operators, so it can reach homes and businesses.

The electricity supplies for new developments are the responsibility of the development and will be paid for by the developer. If reinforcement is required, the costs are apportioned between the developer and the distribution network operator (DNO). Speculative developments will be funded fully by the developer, including reinforcement.

National Grid does not distribute electricity to individual sites and premises directly. It is the role of local distribution companies to distribute electricity to homes and businesses. The local distribution network operator is responsible for operating the local electricity distribution network which supplies electricity from the national electricity transmission system direct to sites and premises. If new infrastructure is required in response to an increase in demand across the local electricity distribution network the operator may request improvements to an existing National Grid substation or a new grid supply point. Rotherham's electricity DNO is Northern

Powergrid, who is responsible for reliability, capacity and maintenance (and emergency response) and also for the operation and maintenance of its own infrastructure.

Northern Powergrid's current business plan covers the 2015-2023 (ED1) regulatory period and sets out how it will invest in its services and network in ED1[5]:

Business Plans for the next regulatory period (RIIO-ED2) are currently in preparation, which will address investment in the network for 2023-2028. Inputs to the Business Plan include the National Grid Future Energy Scenarios (FES) and Northern Powergrid's Distribution Future Energy Scenarios (DFES) which will ultimately help form a "best view" centralised planning forecast of future requirements.

Northern Powergrid now provides two searchable and downloadable mapping function that provide a high-level assessment of electricity generation and demand for a local area. The generation availability heat map provides an indication of the local area network's capability to connect large scale developments to major substations[6]

The demand availability heat map is designed to give a high-level indication (red/amber/green) of the local area network's capability to facilitate new connections[7]

These maps show that, at this time, current capacity is adequate at the strategic assessment level required for the 2020 IDS. It is difficult to predict what the infrastructure requirements to meet the needs of growth at specific locations will be in detail at this stage, as much will depend on local conditions at the time of development, however, based on the locations of growth and trajectory for new housing envisaged, Northern Powergrid has confirmed they cannot see any foreseeable service capacity or availability issues at this time.

Northern Powergrid has also modelled estimated demands at each of the substations across Rotherham based on the anticipated levels of growth, and the results are shown in the table below. This again does not suggest a need for a new substation as part of the growth plans.

5 https://www.yourpowergridplan.com/som_download.cfm?t=media:documentmedia&i=1711&p=file

6 https://www.northernpowergrid.com/generation-availability-map

7 https://www.northernpowergrid.com/demand-availability-map

Table 2: Estimated Sub-station Demand and Capacity

Substation	Requirement (MVA)	Substation Firm Capacity (MVA)	Substation Max Demand (MVA) 2019/20	Available Capacity (MVA) 2019/20	Remaining Capacity after Development Taken into Account (MVA)
Rawmarsh Road 1/2	4.8	39	23.54	15.46	10.66
Kilnhurst	4.88	30	16.57	13.43	8.55
Park Street	4.88	39	13.54	25.46	20.58
Rawmarsh Road 3/4	4.88	39	28.16	10.84	5.96
Dinnington	2.16	30	16.39	13.61	11.45
Wath-on-Dearne	2.4	24	12.38	11.62	9.22
Kilnhurst	0.9	30	16.57	13.43	12.53
Silverwood	1.4	23	14.55	8.45	7.05
Maltby	1.2	35	1.29	33.71	32.51
Beighton	0.9	25	16.36	8.64	7.74
Kiveton Park	0.6	15.3	8.05	7.25	6.65
New Orchard Lane	0.5	23	12.63	10.37	9.87
Ecclesfield	0.3	23	11.98	11.02	10.72
Orgreave	5	23	9.23	13.77	8.77
Waverley	0.3	38	8.51	29.49	29.19

The actual requirement of electricity infrastructure will depend on when sites come forward for a connection. Typically, for infill housing, an electrical connection should be possible within two to three months. For developments up to fifty dwellings, the time for connection can be somewhere between six months to one year. Where a scheme requires larger infrastructure (e.g. >10MW, or serving more than 5,000 dwellings), then the connection time can take anything from one to three years, although usually this is still within the development build-out timescales.

Northern Powergrid's Emerging Thinking 2020 project includes a focus on, Decarbonisation, Network for Net Zero, Long Term Network Development, Climate Change and Resilience.

The Rotherham District Heating Network (RDHN) project aims to provide Rotherham town centre and key industrial energy-using areas of Rotherham with a low cost renewable choice for their heat source. It will take heat from the power plant, which uses renewable waste wood fuels as its energy source, to supply heating to public and private sector commercial, industrial and residential applications.

A planning application was submitted by Templeborough Biomass Power Plant Ltd in 2018 for an energy centre beside the power plant, which was built on disused land at the Firth Rixson Ickles Works, which would ensure an uninterrupted supply of hot water to the heating network. The Templeborough Biomass Power Plant[8] is expected to generate around 41MW of green electricity which is enough to supply 78,000 homes and save over 150,000 tons of CO_2 every year.

3.2.3 Water

Yorkshire Water is the DNO for potable water supply and distribution networks, and for water resources and treatment, for much of the Rotherham area as shown on the map overleaf.

However, the map also shows that the southern extremity of the Borough, principally areas to the east of the M18 (excluding Todwick), relies on Severn Trent Water) for its sewerage service.

The Blueprint for Yorkshire was revised in December 2013 and describes Yorkshire Water's vision and the future direction of the company over the next 25 years[9].

The Water Resources Management Plan (WRMP) was published in April 2020 and provides a long-term view of future challenges in the Yorkshire region, planning ahead for the next 25 years. It ensures that Yorkshire Water can continue to meet customer demand in the future and incorporates future pressures on water supply and demand due to predicted changes to the climate. It looks at future changes in population, housing, water use and metering trends in Yorkshire.[10]

[8] Plan Portal application RB2019/1244 for district heating pipeline

[9] https://www.yorkshirewater.com/media/2054/full-25-year-blueprint-plan.pdf

[10] https://www.yorkshirewater.com/media/2411/water-resources-management-plan-2019.pdf

Figure 8: Yorkshire Water Network Boundary

Source: https://www.yorkshirewater.com/media/1819/734104_yws_arfs_2019_web-min.pdf

Yorkshire Water's most up to date business plan covers the period 2020-2025 and outlines how it will deliver potable water and waste water services over the next 5 years[11].

Severn Trent Water's most recent business plan can be found online[12].

[11] https://www.yorkshirewater.com/our-business-plan/

[12] https://www.stwater.co.uk/content/dam/stw/about_us/pr19documents/sve_full_plan_document.pdf

Potable Water

The Yorkshire Water potable water supply network currently comprises three water resource zones - the Grid Surface Water Zone (SWZ), East Surface Water Zone (SWZ) and East Groundwater Zone (GWZ). Over 95% of the region is now connected to the Grid SWZ, and the areas of growth within Rotherham all fall within the Grid SWZ.

Yorkshire Water predict that there will be no overall water deficit in the region up to 2034/2035, after making allowances for the impact of climate change on water resources, and reductions in demand due to conservation water saving measures.

The Grid SWZ allows water to be transferred throughout the zone to distribute water to meet demands as they arise making full use of the available water resources throughout the region. A new pipeline has increased the resilience on the Grid SWZ to ensure that demand is met up to 2035. Yorkshire Water therefore has adequate capacity in its existing network and upgraded network following connection of the East GWZ to the Grid SWZ and consequently at a strategic level there is no constraint on development.

Waste Water

There are several Wastewater Treatment Works (WwTW) that serve the Rotherham Area, and a high-level assessment has been carried out to assess the impact of the two growth scenarios for each. An upgrade to the Aldwarke WwTW related to the Bassingthorpe Farm strategic site has been identified previously, and this requirement has been confirmed.

The results of this assessment for the other WwTW sites are summarised below:

- Dinnington WwTW – Current Assessments indicated that there is sufficient capacity to accommodate the growth within scenarios 1 and 2.

- Abbey Lathe – Maltby WwTW – Current Assessments indicated that there is sufficient capacity to accommodate the growth within scenarios 1 and 2.

- Slade Hooton WwTW – Current Assessments indicated that there is sufficient capacity to accommodate the growth within scenarios 1 and 2.

- Woodsetts WwTW – Current Assessments indicated that there is sufficient capacity to accommodate the growth within scenarios 1 and 2.

The assessments use high level assumptions based on the best available data at the time and incorporate a number of assumptions and engineering judgements.

Thorpe Salvin WwTW, Hodstock WwTW[13] and Letwell WwTW also serve part of Borough however as no growth is proposed within these catchments no additional assessment has been carried out.

Although there are areas of the Severn Trent Water catchment area that are known to have sewerage constraints, none of these areas are anticipated to present a barrier for future development at this time. They will however mean that further investigation is required as details about site location and scale becomes available. This may potentially result in capacity improvements being required, this should be factored into any development timescales. To minimise delays, it is recommended that both RMBC and developers engage further with Severn Trent Water as more detailed site information becomes more certain to initiate the necessary assessment and subsequent improvements where required.

Outside of the area covered by Severn Trent Water, Whiston and Wickersley are two areas of Rotherham where future housing development may exacerbate already overloaded sewerage infrastructure, causing more frequent storm sewage discharges into watercourses and potentially increasing the risk of flooding due to surface water run-off. Worrygoose Lane sewage pumping station has an agreement to discharge into Whiston Brook via a surface water sewer on Worrygoose Lane. Discharges, while permitted, have led to complaints to the Environment Agency (EA) and RMBC. There are concerns that increased development within the area will lead to capacity issues and increased discharge frequency into the brook.

3.2.4 Broadband and Telecommunications

Openreach and Virgin are the major telecommunication infrastructure providers within Rotherham, although CityFibre is currently building a new full fibre network within the town, providing a future-proof network capable of 10Gbit/s and above.

Progress on superfast and ultrafast broadband rollouts across Rotherham and the speeds people are recording can be found online.[14]

Superfast South Yorkshire (SFSY) is a partnership between Barnsley, Doncaster, Rotherham and Sheffield Councils, Building Digital UK (BDUK), and the SCR Local Enterprise Partnership (LEP), working with Openreach to provide the fibre broadband infrastructure for homes and businesses across South Yorkshire.

[13] Hodstock WwTW catchment covers parts of Bassetlaw District where growth is indicated to occur, but this is not anticipated to result in any impact on the services provided to the Rotherham area of the catchment.

[14] https://labs.thinkbroadband.com/local/E08000018

The Phase 1 rollout contract with Openreach and the BDUK programme has now been completed and helped to make fibre broadband available to 95,000 extra premises (over 97% coverage of the county). As part of the Phase 1 contract, 23,702 premises (residential and business) have been covered for fibre broadband within the Borough. Fibre to the cabinet (FTTC) was the main technology used, which delivered download speeds of up to 80 Mbps to businesses and residents.

Phase 2 of the SFSY programme is underway, making gigabit-capable full fibre (FTTP) broadband available to additional premises throughout the region. Fibre to the premises technology (FTTP) delivers superfast and ultrafast speeds up to 1,000Mbps and covers key Enterprise Zones and Business Parks, with further plans to enable over 9,000 homes (including 958 homes in the Rotherham area) and businesses by Spring 2021.

The new fibre-based network installed by Openreach is open to all Internet Service Providers, meaning households and businesses in South Yorkshire can benefit from a competitive market which brings greater choice and affordability. SFSY also works with the South Yorkshire Local Authorities planning departments to ensure gigabit-capable, full fibre infrastructure is required in all new developments through the inclusion of relevant planning conditions. It is the responsibility of the developer to ensure their new sites are connected and they are advised to engage with infrastructure providers at the earliest opportunity, to ensure the most cost-effective solution. In many cases the infrastructure can be provided free of charge, depending on the size of the development.

In March 2020, the government announced new legislation would be introduced that would see Building Regulations 2010 amended to place an obligation on developers to install gigabit-capable full fibre broadband in new residential sites, although there are no current timescales published as yet for issue of Building Regulations 2020. In addition, this update to Building Regulations does not cover new commercial sites.

Therefore, in order to address this issue and ensure that a consistent approach is maintained across South Yorkshire, SFSY advised the four South Yorkshire Local Authorities that from 1 November 2020 all major applications will be subject to planning conditions requiring the provision of gigabit-capable full fibre broadband, for both commercial and residential development.

Although there will be significant additional demand arising from growth in housing and jobs, at a network-wide level, excess capacity does exist and capacity issues currently affect a very small number of premises. This is usually where homes and businesses are affected from full to capacity FTTC street cabinets via the Openreach network, which in some cases can stop people from ordering a new service. The commercial rollout of FTTP by Openreach and Virgin demonstrates that network capacity should not be an issue in the future, due to increased choice available to

customers. Information that applies to new residential and commercial developments can be viewed online[15].

Residents and businesses within Rotherham's rural communities with broadband speeds of less than 100Mbps can use vouchers worth £1,500 per home and up to £3,500 for each small to medium sized enterprise (SME) to support the cost of installing new fast and reliable connections via the DCMS Gigabit Broadband Voucher Scheme.

CityFibre is investing £29 million in a new full fibre network throughout Rotherham from 2020 to 2023 which will futureproof the Borough's digital infrastructure and provide residents and businesses with access to reliable, high speed and high-capacity full fibre broadband. Construction work commenced in the Kimberworth area in Summer 2020.

Work on a SCR Digital Infrastructure Strategy commenced in June 2020. Initial work has confirmed that the fundamental ambitions of the Superfast South Yorkshire Digital Connectivity Strategy remain sound and that SFSY has been a successful demonstration of regional collaboration. Work is progressing to develop interventions with partners and stakeholders.

3.3 Education

Rotherham is served by a mix of types of school, including Local Authority Maintained, Academies and Free Schools, and RMBC retains the statutory responsibility for ensuring sufficiency of places at any of these. There are currently 95 primary schools, 15 secondary schools, 1 through school (primary to secondary), 6 special schools and 2 pupil referral units (supporting pupils with social, emotional and mental health needs) in the Borough.

However, the Education Act 2011 made a number of significant changes to the education system. Whilst Local Education Authorities (LEAs), now referred to as Local Authorities (LA), in their role as commissioners of education, must continue to plan for and secure sufficient schools for their area in line with their duties under section 14 of the Education Act 1996, the 2011 Act introduced a new academy/free school

[15] https://www.openreach.com/fibre-broadband/fibre-for-developers/registering-your-site

https://www.virginmedia.com/lightning/network-expansion/property-developers

https://www.openreach.com/content/dam/openreach/openreach-damfiles/images/fibre-broadband/fibre-for-developers/registering-your-site/Rate%20card%20website.pdf

https://www.openreach.com/content/dam/openreach/openreach-damfiles/images/fibre-broadband/fibre-for-developers/registering-your-site/OR_10965_Small%20build%20A5%20tri-fold%20leaflet_04%20WEB.pdf

"presumption" under which LAs are required to seek proposals to establish an academy/free school in the first instance where there is an identified need for a new school.

In Rotherham around 75% of schools have become academies already. When schools become academies, the land and building are leased to the Academy Trust for a period of 125 years. In relation to the expansion of an academy school to meet demographic growth, agreement with Trustees and the Regional Schools Commissioner must be sought when drawing up proposals.

14 schools are managed under Private Finance Initiative (PFI) contracts, whereby the physical asset is owned by a private company and RMBC will pay a rental fee for this. Due to this ownership, any future expansion of PFI schools would require a longer lead-in time than normal as consent would need to be sought from the PFI lenders for any works.

To meet growth in Rotherham since 2012, the following additional school places below have been created:

- Thornhill Primary – 105;
- Flanderwell Primary – 105;
- Aston Hall Infant & Junior – 105;
- Herringthorpe Infant – 60;
- Herringthorpe Junior – 80;
- Treeton Primary – 56;
- Catcliffe Primary – 35;
- Sunnyside Infant – 30;
- Sunnyside Junior – 40;
- Bramley Grange Primary – 35;
- Kilnhurst Primary – 14;
- Listerdale Junior Academy – 105;
- Wath Church of England – 210;

- Thurcroft Infant – 45;
- Eastwood Village Primary – 210 (new school completed in 2015 using Targeted Basic Need Funding);
- Brampton Ellis Primary – 80;
- Cortonwood Infant – 30;
- Sandhill Academy – 105;
- Laughton Infant & Junior – 42;
- Newman – 30;
- Wickersley SSC – 200;
- Wales High – 150;
- Wath Comprehensive – 150;
- St Bernard's High – 75;
- Aston Academy – 150;
- Rawmarsh Academy – 150; and
- SEND various – 236.

As the Waverley New Community continues to build out, the Waverley Junior Academy opened in September 2020 to meet pupil yield growth from this area. This school has been built utilising funding from developer contributions as part of a Section 106 agreement and encompasses a two-form entry (60 pupils per year group).

Under the Government's Priority School Building Programme there has been a rebuild of the following schools in recent years:

- Oakwood High School; and
- Wath Victoria Primary School.

There are two stages to assessing the need for new school places/new schools within an area. First, it must be determined what the likely demand for school places is based on changes in population and development, and second, the current capacity of schools in the area needs to be determined.

As the LA, RMBC determines the need for school places based on pupil forecasts that look at demographic trends over the past three years. Reception class numbers are based on projected and live birth rates provided by a range of sources including GP data. These forecasts are updated at regular intervals and take account of pupils moving into and out of the Borough and outstanding planning permissions for housing developments.

There is a single national measure to assess the net capacity of schools specified by the Department for Education (DfE), which should ensure a robust and consistent method of assessing the capacity of schools. The measure is used to identify a surplus or shortage of school places within schools.

3.3.1 Primary / Early Years

Under the Childcare Act 2006 & 2016, local authorities have a duty to ensure that parents are able to access the free early education entitlement of 570 hours of free early education provision over at least 38 weeks for each eligible two-year-old and all three- four-year-olds in each 12-month period from the date at which the child's entitlement starts (term after second / third birthday) until the child reaches compulsory school age. In addition, Local authorities must secure availability of an additional 570 hours of free provision over at least 38 weeks for each three and four-year-old of working parents who meet the eligibility requirements.

The free entitlement is provided by a range of different Ofsted registered early years providers including schools, day nurseries, pre-schools and childminders.

For primary and early years, there is still some capacity at Maltby and Thurcroft in addition to the additional places already provided, meaning that the requirements for additional primary school places are likely to be required through extensions to the following schools:

- Greasbrough Academy/Thornhill Primary;
- Listerdale Junior Academy;
- Treeton Primary;
- Wales Primary;
- Wath Victoria;
- ** Whiston Worrygoose Infant & Junior / Whiston Infant & Junior or neighbouring primary school;
- ** Whiston Infant & Junior / Sitwell Infant & Junior;

- Thorpe Hesley Primary; and
- Ravenfield Primary,
- as well as a need for additional places in the broad areas of Dinnington, Anston and Laughton Common, Aston, Aughton and Swallownest, and Maltby (depending on the growth scenario pursued).

**** exact school(s) would be determined by respective school governing body appetite to expansion**

A new primary school, Waverley Junior Academy, located within the Waverley community opened in September 2020. There is also a new primary school planned within the Bassingthorpe Farm strategic site. This is proposed to be delivered in two phases with the main school facilities being provided by occupation of the 850th dwelling and additional classrooms provided as second phase after completion of the 1750th dwelling.

Following the build and opening in 2015 of Eastwood Village Primary, this has created a surplus capacity of school places in the town centre area. RMBC's key priority would be to utilise the existing surplus capacity in existing schools in relation to additional pupil yield from the central area, prior to considering any further capacity increases.

3.3.2 Secondary

There are a few locations where there is surplus secondary capacity at this point in time to accommodate growth – these locations include Thorpe Hesley and Swinton. There are some highly popular secondary schools that are stretched at present and any future requirement will need to be carefully planned in advance of the requirement, these include locations around Bramley/Wickersley, Wales and Brampton. It is clear to see that the majority of locations move into a deficit position once the growth envisaged within the current Local Plan are factored in, with specific future needs identified as extensions to:

- Wingfield;
- Wickersley Academy;
- Maltby Academy;
- Aston Academy;
- Wales High School;
- Brinsworth Academy;

- Rawmarsh Community;
- Oakwood High;
- Thrybergh Academy; and
- St Pius X.

3.3.3 Special Educational Needs and Disabilities / Social, Emotional & Mental Health

Following changes to the DfE requirements around special educational needs and the introduction of Education Health and Care Plans (EHCP) more children with Special Educational Needs and Disabilities (SEND) / Social, Emotional and Mental Health (SEMH) are being educated in mainstream education settings with additional support. This has prompted schools to require more space for additional support, therapy and intervention work – and both the Rawmarsh and Dinnington areas have been identified as locations where such additional space will be required.

3.3.4 Sixth Form and Colleges

Under the Apprenticeships, Skills, Children and Learning Act 2009, Local Authorities have a duty to ensure that sufficient and appropriate education and training opportunities are accessible to all young people aged 14-19 and those up to 25 for young people with learning difficulties and/or disabilities.

3.4 Health

Healthcare in England is provided by a range of organisations under the umbrella of the Department of Health and Social Care (DHSC) which has the responsibility for strategic leadership of both the health and social care system.

The National Health Service (NHS) in England commissions specialised services (for example, cancer, renal and forensic mental health services) and some primary care such as dentistry, ophthalmology, offender healthcare and some services for the armed forces. NHS England also has a number of roles including funding local Clinical Commissioning Groups (CCGs) to commission services for their communities and ensures that they do this effectively – these are groups including local GPs with commissioning responsibilities that took over responsibility for commissioning local health services following the abolition of Primary Care Trusts (PCTs) in April 2013.

The NHS Long Term Plan, published in January 2019, is a new plan to improve the quality of patient care and health outcomes and sets out the expectation of modern, resilient primary care supported by excellent community care including mental health and an integrated service model which ultimately reduces reliance on hospital-based

services. It also sets out how the £20.5 billion budget settlement for the NHS, announced by the Government in Summer 2018, will be spent over the next five years.

With the publication of the Implementation Framework in June 2019, local providers were asked to develop their five-year strategic plans.

Across the area covered by Rotherham CCG, there are 29 general practices sited in over 50 premises ranging from rural branch surgeries, to large single or multiple practices in fully maintained buildings. The practices provide primary healthcare services to around 265,000 registered patients.

More people are now living with long term conditions such as diabetes and heart disease or suffer with mental health issues and may need to access their local health services more often. To meet these needs, practices have begun working together and with community, mental health, social care, pharmacy, hospital and voluntary services in their local areas in primary care networks.

Primary care networks build on the core of current primary care services and enable greater provision of proactive, personalised, coordinated and more integrated health and social care. Clinicians describe this as a change from reactively providing appointments, to care more proactively for the people and communities they serve. Primary care networks are based on GP registered lists, typically serving natural communities of around 30,000 to 50,000.

The creation of these networks has resulted in many more additional roles in general practice, and a greater number of services being delivered in the community as opposed to hospital-based care. This is a very positive step for patients as it allows care to be delivered closer to home, and by clinicians they know and trust. Conversely, it has compounded the existing issue of capacity within primary care.

The CCG Estates Strategy commissioned in 2018 indicated that only 7 of the 29 practices technically have sufficient floor space to meet the needs of their patient list size, however in reality that floor space may not be practically usable, and only two practices are deemed to have adequate space within which to operate. The primary care estate is a mix of NHS owned and leased property, privately owned and leased property, and privately owned property. As a commissioning organisation, the CCG has indicated that it does not have the power or capital funds to expand or improve the primary care estate without outside funding support.

Any increase in patient population creates further pressure on existing services. As primary care funding is provided per capita at the point of patient registration, the CCG has identified that it will not be possible to plan to meet the increasing demand created by developments without external funding contributions to infrastructure costs. The workforce of general practice is also facing a national shortage of GPs and other clinicians – this situation is not unique to Rotherham, but it makes recruitment

and retention of staff very difficult. It is not necessarily possible to hire more staff when the practice population increases and therefore primary care faces increasing pressure.

Particular pressures in the future will come in areas of anticipated high patient growth, this includes the Bassingthorpe Farm strategic site, and at Waverley. Services in Dinnington/Anston, Bramley/Wickersley, and Maltby/Hellaby are already operating above capacity and practices cannot pro-actively respond to increased demand.

There are currently two live funding bids for capital projects to be funded by HM Treasury - a new practice at Waverley to service the population of this significant development, and an expansion of Broom Lane Medical Centre on the edge of the town centre. The Waverley practice will create much needed breathing space for the services on the periphery of the development - they have experienced significant list size increases as a result of the planned practice being delayed. However, both of these projects are still in the approval stages and are not yet committed investments. The CCG has commissioned feasibility studies to identify the best response on which to base future bids for capital funds and primary care estate developments.

The COVID-19 pandemic has affected the way general practice delivers primary care services - telephone and video consultation are now more mainstream and could continue in that vein in future. This reduces the need for consultation rooms as clinicians can operate from anywhere, theoretically. This new way of working does have the potential to ease the existing pressure on estate capacity, but patients still often need to be physically seen, and expansion is still much needed to provide the required standard of patient care whilst accommodating the growing number of roles in general practice.

Electronic prescribing will also assist patients to make requests for their regular medication and collect it direct from the pharmacy of their choice, removing the unnecessary step of travelling to and from the practice itself in the future. This is part of a national drive to further remote and electronic access to primary care services.

Failure to secure adequate commitment to fund the development and expansion of primary care services within future growth plans will place additional pressure on services that are already struggling to cope. There are a number of work streams in place to attempt to ease this pressure, and some essential new facilities have been identified, but increasing patient numbers without matching investment in healthcare infrastructure will reduce the capacity of services to respond to need.

3.5 Waste

The waste collection service in Rotherham is provided by RMBC who has been acting as the Unitary (Collections and Disposal) Authority. Together with Barnsley and Doncaster Councils, Rotherham were allocated PFI funding of £77.4 million to optimise the

effectiveness of waste treatment and disposal methods. The three authorities worked together to produce a Joint Waste Plan which runs from July 2011 to 2026. This sets out what, where, how and when waste management will be provided.

Each authority has a separate waste strategy and the city of Sheffield also has an important role in the plan area in the context of the waste hierarchy, and so strong links have been established between the Councils and the waste operators through a SCR-led programme. In 2017 the four South Yorkshire Local Authorities worked together to produce the South Yorkshire Municipal Waste Strategy.

Currently there is sufficient waste collection capacity in Rotherham to cope with growth until 2022. The current method of residual waste treatment and disposal is for waste to be taken to the BDR waste treatment facility at Manvers. Here the waste is shredded and dried and there are targets to recycle and compost 18% of the waste input and divert 95% of the input waste from landfill. Dried waste goes through a refinement section and glass, stone, metals and plastics are removed and sent for recycling. Fines are processed in the onsite anaerobic digestion plant which generates electricity to help power the facility. The remainder of the waste is a solid recovered fuel which is sent to Ferrybridge multifuel facility for final disposal. This is a R1 recovery facility (those that use incineration of waste for use principally as a fuel or other means to generate energy) and the air pollution control residues and incinerator bottom ash from this plant are recycled. The facility has the capacity to treat up to 250,000 tonnes per year of residual waste - currently between Barnsley, Doncaster and Rotherham, approximately 214,000 tonnes is expected to be processed in 2020/21.

Key existing waste sites within the Borough are as follows:

- BDR waste treatment facility at Manvers;
- Eastwood dredging facility;
- Rotherham Road materials recovery facility; and
- Landfill at Thurcroft (non-inert waste) and Harrycroft Quarry (inert waste).

RMBC instigated changes in its collection and recycling service in October 2018. The first change was moving from a free garden waste collection to a charged garden waste collection. The 240 litre bins that had previously been used to collect the garden waste were re-purposed to collect paper and card. A new bin was provided to residents who wished to make use of the charged service.

Following those changes a new 180 litre bin with a pink lid was rolled out to put residual waste in and the existing larger bin was re-purposed to collect dry recycling including glass, cans, plastic bottles, pots, tubs and trays. As a result, prior to the

COVID-19 pandemic, Rotherham saw a decrease in their residual waste collected at the kerbside of around 7%. Dry recycling had previously been collected in a box and the introduction of the wheeled bin along with the ability to recycle plastic resulted in an increase of around 50% in the amount collected at kerbside.

Prior to the COVID-19 pandemic, a downward trend for residual waste was forecast. However, throughout 2020 there has been an increase in kerbside collected household waste, in some cases of up to 20% more. Although the increase has reduced more recently, it is difficult to ascertain what the overall impact will be at the end of 2020 and what the impact of increased home working is likely to be long term. However, as the BDR waste treatment facility has available processing capacity for a further 36,000 tonnes and there is a strategic drive for waste reduction, it is reasonable to expect the facility to have sufficient capacity to process residual waste up to the contract end in 2040.

Given the number of additional households likely over the Local Plan period, there will be a need for a rebalancing of rounds and potentially a change in the way the collection service is provided to maximise the use of the current vehicles. The current collection vehicles are due to be replaced in 2023 so any implications for the number of vehicles needed will be built into the procurement process.

There may be a need to consider the provision of a transfer station for RMBC to allow for bulking and haulage of waste and recycling materials to minimise the amount of time spent on travel.

The UK in general has a shortage of recycling processing plants. Material from Rotherham is processed, bulked and sent to other areas for final treatment – there are limited re-use and repair facilities. The Resource and Waste Strategy for England focuses on waste reduction, redesign, reuse, repair and recycle. To help RMBC meet the challenge of carbon reduction targets and the higher recycling targets that are now in place for industry and households alike, greener infrastructure would be beneficial.

The household waste recycling centre (HWRC) network had significant issues with queuing on the highway during the COVID-19 pandemic, due in the main to social distancing measures that had been put in place and reduced opening hours. However, if the HWRC provision was to be reviewed in the future, it may be prudent to consider expansion of the sites where possible and consideration of ways to mitigate the impact of any longer-term social distancing through a redesign of the facilities.

The waste collection and disposal service will be required to comply with the Waste and Resource Strategy for England and other measures in the Environment Bill. The waste reduction, reuse, repair and recycle measures all contribute positively to the net zero carbon commitment and the service will be looking to focus on these aspects more in the future.

3.6 Green and Blue Infrastructure

Rotherham enjoys an extensive green and blue infrastructure network of accessible greenspaces and natural habitats both within and which connect towns and villages. These include public parks, recreation grounds, playing fields, woodland, street trees, allotments, informal open green spaces, churchyards and cemeteries, woodlands, local nature reserves, canals and rivers, watercourses and wetland sites, brooks and reservoirs. It also boasts three country parks at Ulley, Thrybergh and Rother Valley.

RMBC is currently the main provider of green space.

3.6.1 Parks and Recreation

As this time, two particular projects have been identified to support the growth predicted in the future year scenarios.

The Eco-Vision is a collaborative project between the three local authorities of Barnsley, Doncaster and Rotherham and key organisations operating in the Dearne Valley. The Eco-Vision is a long term, 20-30 year project for a high quality, low carbon environment bringing new jobs and leading technologies and techniques to tackle climate change.

The Dearne Valley Green Heart organisation is a partnership of the RSPB, EA, Natural England and Barnsley, Doncaster and Rotherham Councils. It works to improve the green spaces of the Dearne Valley for local people and wildlife through raising awareness about flooding and climate change and improving access around the valley.

3.6.2 Flood Risk and Flooding

The EA is charged with maintaining a strategic overview of flood risk management throughout England – this is articulated through a National Flood and Coastal Erosion Risk Management Strategy. Improving resilience of the existing flood defences throughout Rotherham and South Yorkshire due to climate change and the need to withstand high levels of river flow during prolonged periods of rainfall (such events are likely to become more frequent over the coming years) will require increased funding.

The River Rother is managed by the EA to mitigate flooding in Rotherham, through a series of regulators and washlands. It uses a cascade of regulator gates at Meadowgate, Woodhouse Mill and Canklow to divert water into washlands and provide a constant or much reduced flow rate downstream of Canklow Regulator. This reduces the risk of the peaks in the River Rother and the River Don coinciding at Rotherham. All three regulators were operated in November 2019 due to flooding. The EA Regulators Refurbishment programme is underway, beginning with Meadowgate.

The EA will need to look for alternative funding sources to maintain flood defences in the future, however, specific requirements in respect of this are currently unknown.

RMBC and the EA have identified several major flood alleviation scheme (FAS) projects across the Borough. The projects that are expected to be promoted first, subject to sufficient partnership funding being made available to RMBC, include:

- Rotherham Renaissance FAS (at Templeborough, Rotherham town centre and Parkgate) – see below for specific measures;
- Eel Mires Dike FAS (at Laughton Common);
- Whiston FAS;
- Catcliffe Pumping Station;
- Kilnhurst Village FAS; and
- Parkgate & Rawmarsh FAS (at Barbot Hall industrial estates, Parkgate and Rawmarsh).

Once complete, the Rotherham Renaissance FAS (RRFAS) will extend 5km along the River Don, with works also being constructed from the River Don's confluence with the River Rother, through the town centre to Eastwood. The fully completed scheme will provide a 1 in 100-year level of protection from river flooding throughout this area (that is, a flood event which has a 1% chance of occurring in any year would be defended against). This area includes many existing businesses, key employment areas, the local highway network (including some roads that form emergency access routes), and the rail and tram-train corridor that passes through Rotherham Central and Parkgate stations.

RRFAS is being delivered incrementally, with some sections constructed as part of new development proposals. RMBC have produced a "Flood Risk Toolkit" to guide development on the flood defence measures to be taken to support the comprehensive delivery of the scheme. The toolkit has "additional planning guidance" status and has been in place since 2011.

Around 1.6km of the RRFAS is planned to be implemented between 2019 and 2022 in parallel with regeneration opportunities in Rotherham town centre. It is estimated that up to 20% of the land area within the scheme will be for new development, whilst the rest of the scheme will be to reduce risk to existing land uses and transport infrastructure.

Early phases of work on RRFAS have helped to reduce flood risk from the River Don in the Templeborough and Rotherham town centre areas.

Early phases of work on Parkgate & Rawmarsh FAS have helped to reduce flood risk from Greasbrough Dike and Old Sough/Boundary Dike (i.e. in the upper and middle part of their catchment), but the full 5km RRFAS extent is also needed to reduce flood risk from the River Don (in the downstream parts of the catchments of these two watercourses).

Developments within the RRFAS extent could be required to contribute towards the creation of new flood risk management infrastructure, either through the direct construction of segments of the RRFAS as part of development proposals or through financial contributions towards its future construction.

Overall, around £52 million of future investment is needed for these flood alleviation schemes (FASs). There is also a requirement for a culvert's renewal programme at various locations across the Borough at an approximate cost of £2 million.

It is unlikely that these schemes would prevent development from taking place, unless the development itself were not appropriate (for example, due its risk of flooding), or if it were to prevent the flood defence projects from being constructed, inspected, maintained and operated in the future. Any development will have to ensure access to the main river is maintained for heavy machinery for maintenance and incident response purposes.

For all the FASs identified, the following issues need to be considered in the planning of new infrastructure:

- Avoiding new development in areas where flood defence structures need to be constructed;
- Avoiding new development on land that would need to be inundated during flood events behind proposed flood storage reservoirs;
- Securing key access corridors that will be required to enable the FAS projects to be constructed; and
- Securing access corridors to enable the FAS projects to be inspected, maintained and operated in the long term, noting that their asset life would typically be a minimum of 120 years.

Implementation of the FASs themselves may make some areas more attractive for development through reducing their risk from flooding, however, it is unlikely that the works will significantly increase the capacity for new development in terms of making more land and space available for development.

The FASs will be listed in the EA's Flood Coastal Erosion Management Investment Plan (often referred to as the 'EA Medium Term Plan'), which is currently in the process of

being refreshed, so the current version does not yet include all of the FASs listed above.

The EA will not construct or upgrade flood defences to promote new development within flood risk areas. Where new or renewed flood defences provide protection for both new and existing properties, costs are divided pro-rata between developers and the EA.

There are known challenges in delivering flood defences in the following locations:

- All riverside sites within the extent of RRFAS, located alongside the River Don, River Rother, Greasbrough Dike and Old Sough/Boundary Dike;
- All sites within the extent of Parkgate & Rawmarsh FAS, located immediately adjacent to Greasbrough Dike and Old Sough/Boundary Dike;
- Bassingthorpe Farm strategic site allocation: a large flood storage area is proposed under the Parkgate & Rawmarsh FAS project within the strategic allocation boundary – in Greasbrough Dike Valley, between The Whins and Mangham Road; and
- Forge Way, Parkgate alongside Greasbrough Dike, between the two railway lines, where flood defences are proposed under the Parkgate & Rawmarsh FAS project.

The areas that would be at reduced risk of flooding if the FASs listed above were to be constructed include areas that previously flooded on several occasions (for example, both the June 2007 and November 2019 flood events had local and regional impacts) and could potentially release further land for development opportunities.

The draw on both RMBC and emergency responders' resources during flood events could also be significantly reduced with the construction of the FASs.

With regard to surface water flood risk, which generally results in more localised flood risk impacts, there are several known problem locations, some of which flood relatively frequently, and with little or no warning time to prepare for flooding. However, the extent and impact of flooding is dependent on a range of issues, for example, the location and intensity of rainfall, whether there are any structural conditions or blockage issues.

RMBC have responsibilities, duties and statutory powers as the Lead Local Flood Authority (LLFA) and in relation to designated ordinary watercourses, surface water flooding and groundwater flooding, as set out in RMBC's Local Flood Risk Management Strategy.

Flood risk management works will therefore be delivered by RMBC that are not listed on the EA's Flood Coastal and Erosion Management Investment Plan. This is likely to include works that do not attract EA funding and/or are a local priority that RMBC have decided to implement. Examples could include, but are not limited to: localised land drainage/surface water management, culvert repair/upgrade works and resilience works to highways and/or communities.

The EA will be taking a catchment-based approach to addressing the climate emergency and will be promoting nature-based solutions (the 'Source to Sea' Project) which is split into Upper, Middle and Lower Don. The Middle Don element will cover Rotherham.

The Middle Don section of the Source to Sea Project is primarily aiming to support climate resilience along the River Don as well as providing multiple wider benefits for people and wildlife as part of a whole catchment programme starting in the Peak District and running to the Humber estuary. This programme is aiming to support engineered flood defences along the River Don with a strategic network of nature-based solutions which include peat restoration, tree planting, floodplain reconnection and wetland creation schemes.

New developments should not only protect watercourses and their riparian corridors but also provide overall net gain for biodiversity. Net gain for biodiversity is defined as delivering more or better habitats for biodiversity and demonstrating this through use of the Defra Biodiversity Metric. It encourages development that delivers biodiversity improvements through habitat creation or enhancement, after avoiding or mitigating harm.

Opportunities to deliver biodiversity net gain could include, but should not be limited to:

- Creating wildlife ponds and scrapes;
- Planting native hedgerows and shrubs; and
- Installing bat and bird boxes.

The EA will continue to work in partnership with other relevant bodies in respect of capital and maintenance funding for green, flood defence and water infrastructure. However, it is anticipated that the majority of this type of infrastructure, where required to facilitate growth, will need to be funded by those proposing development.

3.6.3 Surface Water

As a minimum, developments on greenfield sites should attenuate surface water runoff to existing greenfield runoff rates for all events up to and including the 1% (including climate change) storm design event.

The Non Statutory Technical Standards S5 (NSTSS5) states that:

"For developments which were previously developed, the peak runoff rate from the development to any drain, sewer or surface water body for the 1 in 1 year rainfall event and the 1 in 100 year rainfall event must be as close as reasonably practicable to the greenfield runoff rate from the development for the same rainfall event, but should never exceed the rate of discharge from the development prior to redevelopment for that event."

The NSTSS5 should be applied to brownfield sites.

As part of detailed planning applications, applicants will need to submit detailed assessments in accordance with the latest national and local policy requirements such as Flood Risk Assessments and take account of water quality directives.

New surface water drainage infrastructure will be developer funded for each individual site. A commuted sum may also be payable by the developer where third party adoption of SuDS assets takes place to secure long term maintenance and repair. Where connections to existing public surface water sewers are necessary the developer will be responsible for any costs incurred. Where surface water discharges to Internal Drainage Board (IDB) watercourses are necessary the IDB may require a commuted sum payment.

Surface water capacity of existing systems (including designated ordinary watercourses) are limited in a number of areas of the Borough; however, these can only be considered on site specific basis, which is typically when a planning application has been received for a new development. Therefore, some development sites could be become unviable if surface water risks cannot be appropriately mitigated.

3.6.4 Wayfinding and Green Links

The Rights of Way Improvement Plan (ROWIP) was noted, it identifies and evaluates the needs of various users and summarises the current levels of public rights of way and recreational countryside access provision.

Some of the issues identified in the assessment of current provision include:

- The considerable scope and demand to develop facilities on the urban fringe and in rural areas;

- The network available to equestrians and cyclists is limited;

- The network of local rights of way are generally inaccessible to disabled users;

- There is a strong demand to develop circular routes; and

- In rural areas, where Rights of Way are linked by road, many stretches of roads are unsafe for users.

Implementation of the ROWIP will most likely be through partnerships and collaboration as part of other infrastructure requirements set out in the 2020 IDS and/or through the build-out of individual sites.

The Council and its partners aspire to deliver the Trans Pennine Trail Recreation and Active Transportation Project. The main east-west trail passes Wath and Swinton while the south links pass directly through the borough and town centre, passing Meadowhall and villages in the south of the borough before heading to Chesterfield, passing through Rother Valley Country Park.

The trail was launched in 2000 and, while the route is physically available on the ground and utilises a large part of the rights of way network it has not been the subject of focus and attention beyond its daily use by local people and recreational users. Despite this, some 75,000 people use monitored sections of the route each year.

This proposed project seeks to capitalise on the amenity and potential financial value of the trail through enhancing linkages into the local community and businesses. With local lockdowns increasing awareness of the local right of way network more users than ever are taking exercise. This project would increase that use by working to widen the availability of access to the maximum number of users including those with disabilities, families and a diverse range of users, particularly cyclists. A total project cost of £900K is estimated and for this the Borough would gain:

- A promoted easy for all to use trail passing through the heart of urban and rural communities.

- All sections of the trail and linkages promoted to cycling and the less able where feasible.

- A single Trans Pennine Trail (presently there are 3 routes south as well as the main east-west route) acting as the focus of active transport and recreation with promoted linkages to local business.

3.7 Community Facilities

Currently, cultural venues including libraries, museums and historic buildings typically provide access to culture in town centres, district (neighbourhood) centres and major rural settlements. The main community facilities covering the Rotherham area and their future needs are outlined below.

3.7.1 Sport and Leisure

Rotherham's leisure centres are operated and managed by Places Leisure, who specialise in developing and managing leisure facilities in partnership with councils throughout the UK. The Council continues to seek funding opportunities to deliver an up to date playing pitch strategy which will inform future decision making. The Moving Rotherham Group brings together the main strategists and deliverers of sport and physical activity within the borough. The plan for Sport and Physical Activity in Rotherham for the coming period is in development (following on from the 2010 – 2020 Strategy) and an overview can be found online[16].

Previously a number of projects were identified to support the growth envisaged in the Local Plan and work continues to ensure they meet the needs of local communities in coming years:

- Creation of, and improvements to playing pitches;
- Four leisure centres (now delivered);
- Play facilities;
- Open parks and green spaces; and
- Voluntary sector projects.

3.7.2 Libraries

There are 15 libraries across the borough. Currently 98% of Rotherham residents are able to access a library within 2 miles of their home.

The library service currently comprises the following:

[16] https://movingrotherham.wixsite.com/website

- The central library in Rotherham town centre, which acts as the main hub for the rest of the library system;

- 14 community libraries ranging in size and reach depending on the size and makeup of each local community – these are based in Aston, Brinsworth, Dinnington, Greasbrough, Kimberworth, Kiveton Park, Maltby, Mowbray Gardens, Rawmarsh, Swinton, Thorpe Hesley, Thurcroft, Wath and Wickersley;

- Vehicle-based services, mainly to older people who might otherwise be unable to get to a library; and

- Schools' Loan Service, which offers resources to support reading, literacy and the wider curriculum in schools.

The Library Strategy 2021 – 2026 was adopted by the Council in November 2020. This will deliver improvements to public IT and self-service facilities, café and toilet facilities, and improved décor, furniture and signage. Other improvements include:

- Co-location of Kiveton Park Library with Children and Young People's Services;

- Relocation of Thurcroft Library to Gordon Bennett Memorial Hall; and

- Relocation of Swinton Library to the former customer service centre as part of the wider redevelopment of Swinton centre.

To support the growth envisaged by the Local Plan, the following interventions have been identified:

- Relocation of the Central Library from Riverside House to within Rotherham Town Centre as part of the Market's redevelopment.

- Redevelopment of Greasbrough Library;

- Extension/Improvements to Dinnington Library;

- Redevelopment of Wath Library;

- Relocation of Thorpe Hesley to a larger more central site; and

- New library provision to serve Waverley New Community.

3.7.3 Community Hubs

At present, there is no single body or department that has responsibility for community meeting infrastructure provision. The Regeneration & Environment, and

Adult Care, Housing & Public Health Directorates of RMBC currently manage physical assets for a number of existing facilities across the Borough. These include community centres and neighbourhood centres that are either leased by community groups or rented on an hourly basis. Community hubs are proposed and to be funded by the respective developers at Waverley New Community and Bassingthorpe Farm.

3.8 Emergency Services

The three main emergency services, Police, Fire and Rescue and Ambulance, are responsive organisations with a duty to serve the population within their area, and so the deployment of resources is based on response times to serve this population. These services are not a significant driver or barrier to growth and will generally deploy their resources to serve the scale and location of new development. No significant infrastructure requirements have been identified as being required to support the current Local Plan. The current Yorkshire Ambulance Service (YAS) NHS Trust premises are identified in the table below and the potential housing growth associated with the Development Scenarios has been shared with the YAS planning team for future consideration.

Table 3: Current YAS Premises

Asset Type	Site Name	Address	Post Code	
Ambulance Station	Maltby AS	89A Rotherham Road, Maltby, Rotherham, South Yorkshire	S66	8LZ
Ambulance Station	Rotherham AS	Moorgate Road, Rotherham, South Yorkshire	S60	2UD
Ambulance Station	Wath AS	Doncaster Road, Wath-upon-Dearne, South Yorkshire	S63	7DN
Support Service	111 Callflex	Callflex Industrial Park, Doncaster Road, Wath Upon Dearne	S63	7EF
Support Service	OSU Magna	Units 7 & 8, Ignite, Magna Way, Rotherham	S60	1FD

4 Implications for the Local Plan

The commentaries in Section 3 explain and review key features, delivery characteristics, key deficits and necessary improvements associated with the different infrastructure types involved with each category. Since the previous 2012 IDS was produced significant new and upgraded infrastructure has been provided in the Borough including:

- The M1 in the Borough has been improved, M18 Junction 1 upgraded and a scheme committed to widen the A630 Parkway between the Catcliffe interchange and M1 Junction 33;
- The tram-train service was introduced in 2018, via the new Tinsley Chord, linking the Sheffield Supertram system with the national rail network and serving Rotherham Central station and Parkgate shopping centre (a new stop is also planned at Magna);
- Gas mains have been updated through a replacement programme across the Rotherham area;
- A new water supply pipeline has increased the resilience of the Yorkshire Water grid which allows water to be moved around the region to meet needs;
- Phase 1 of Superfast South Yorkshire (SFSY) has provided fibre broadband infrastructure for 23,702 homes and business premises across the Borough using Fibre to the cabinet (FTTC) technology and Phase 2 of SFSY is underway, making gigabit-capable full fibre (FTTP) broadband available to additional premises throughout the region;
- The City Fibre project has started on site;
- An additional 2,633 school places have been created at 26 schools;
- The new Waverley Junior Academy school has opened;
- Two schools have been rebuilt under the Government's Priority School Building Programme;
- Funding bids have been submitted for a new health practice at Waverley and an expansion of Broom Lane Medical Centre on the edge of the town centre;
- The Manvers Waste Treatment Facility for Barnsley, Doncaster and Rotherham opened in 2015, providing a combined Mechanical Biological Treatment Facility and Anaerobic Digestion Plant;

- Changes were made to RMBC's waste collection and recycling services in 2018, including for garden waste collection, dry recycling and residual waste;

- Regulator gates along the River Rother which mitigate flooding in Rotherham by diverting water into washlands are currently included in an Environment Agency refurbishment programme;

- Clifton Park Museum has been redesigned to improve the offer and a digital offer developed using social media; and

- Engagement and community management models have been developed at the Catcliffe Glassworks Cone and Waterloo Kiln and Keppel's Column heritage sites (the latter is currently being restored) and a masterplan is being developed to refurbish the Boston Castle site.

4.1 What Infrastructure is Required Where and What Existing Capacity is There?

The 2020 IDS Update has, through engagement with infrastructure providers, gathered intelligence on infrastructure capacities and identified key infrastructure improvement needs across the Borough of Rotherham. Drawing on the commentaries in section 3 and the two potential development scenarios, key infrastructure requirements and proposals are set out below for the eight categories of infrastructure:

4.1.1 Transport

- Improving highway and public transport links between the centre of Sheffield and the AMID focused on the SCR Innovation Corridor;

- Improving the A57, A631 and some key junctions on the KRN, as well as localised improvements at Swinton, Kiveton Park and Dinnington and associated with Bassingthorpe Farm strategic site;

- Expanding the tram-train network through Swinton to Doncaster, with potential new rail stations on the main line in Rotherham and for the Waverley new community and the Advanced Manufacturing Park;

- Enhancing the key bus corridors from Rotherham to both the Dearne Valley and Maltby;

- Promoting and protecting a Borough-wide network of rights of way;

- Supporting active travel improvements on a corridor-wide basis, in particular from Rotherham to Wickersley, Whiston, Thrybergh, Thorpe Hesley and Greasbrough, as

well as walking and cycling improvements in the town centre and further cycle connections to the Bassingthorpe Farm strategic site.

4.1.2 Utilities

- Continuing to replace gas mains across the Borough;
- Providing low-cost heating to public and private sector commercial, industrial and residential applications through the Rotherham District Heating Network using renewable waste wood fuels from the Templeborough Biomass Power Plant;
- Actual requirements for electricity infrastructure will depend on when sites come forward for a connection and local conditions, but based on the locations of growth and trajectory for new housing used for this Updated IDP 2020, Northern Powergrid has not identified any foreseeable service capacity or availability issues at this time or needs for a new substation;
- Upgrading the Aldwarke WwTW to serve the Bassingthorpe Farm strategic site;
- Addressing any implications from increased development on already overloaded sewerage infrastructure in the Whiston and Wickersley areas, and for the Worrygoose Lane sewage pumping station;
- Based on both development scenarios the Dinnington, Abbey Lathe – Maltby, Slade Hooton and Woodsetts WwTWs have sufficient capacity to accommodate the potential proposed growth;
- Areas known to have sewerage constraints in the Severn Trent Water catchment area are not anticipated to present a barrier for future development at this time, but further site related investigation will be required and capacity improvements could be needed;
- Enabling 958 homes and key business zones in the Rotherham area to benefit from Fibre to the premises technology (FTTP) with superfast and ultrafast speeds up to 1,000Mbps by Spring 2021;
- Gigabit-capable, full fibre infrastructure is required in all new developments through the inclusion of relevant planning conditions and developers are responsible for ensuring that their new sites are connected, benefitting from the City Fibre project; and
- No overall water supply deficits in the region have been identified up to 2034/2035, after making allowances for the impact of climate change on water resources, and reductions in demand due to conservation water saving measures – at a strategic level there is no constraint on development and the current

arrangements allow water to be transferred to meet demands as they arise making full use of the available water resources throughout the region.

4.1.3 Education

- Providing additional primary school places through extensions to the following schools: Greasbrough Academy/Thornhill Primary; Listerdale Junior Academy; Treeton Primary; Wales Primary; Wath Victoria; Whiston Worrygoose; Whiston Infant & Junior/Sitwell Infant & Junior; Thorpe Hesley Primary; and Ravenfield Primary;

- Providing additional primary school places in the broad areas of Dinnington, Anston and Laughton Common, Aston, Aughton and Swallownest, and Maltby (depending on the growth scenario pursued);

- Delivering a new primary school planned within the Bassingthorpe Farm site strategic site;

- Addressing the deficit of secondary school places at the majority of locations with future needs identified as extensions to Wingfield; Wickersley Academy; Maltby Academy; Aston Academy; Wales High School; Brinsworth Academy; Rawmarsh Community; Oakwood High; Thrybergh Academy; and St Pius X; and

- Providing more space for additional SEND/SEMH support, therapy and intervention work in both the Rawmarsh and Dinnington areas.

4.1.4 Health

- Improving or expanding primary care facilities, in particular general health practices - as only 7 of the 29 practices in Rotherham technically have sufficient floor space to meet patient needs and only two practices are deemed to have adequate space within which to operate; and

- Addressing future pressures from anticipated high patient growth in areas already operating above capacity including Dinnington/Anston, Bramley/Wickersley, and Maltby/Hellaby. Securing HM Treasury funding for a new facility at Waverley would address pressures on local surgeries. Funding will be required to support a new surgery required on site at Bassingthorpe Farm.

4.1.5 Waste

- The main waste treatment facility serving Rotherham at Manvers currently has capacity to treat more waste and with the drive for waste reduction should have sufficient capacity to process residual waste up to 2040;

- The likely additional households over the Local Plan period to 2040 will require a rebalancing of waste collection rounds and potentially collection service changes to maximise the use of vehicles; and

- Future consideration may need to be given to the provision of a transfer station for RMBC and redesigning or expanding, where possible, household waste recycling sites.

4.1.6 Green and Blue Infrastructure

- Providing a high quality, low carbon environment bringing new jobs and leading technologies and techniques to tackle climate change, particularly through the Dearne Valley Eco-Vision project and other projects to be developed;

- Improving the green spaces of the Dearne Valley for local people and wildlife through raising awareness about flooding and climate change and improving access through the Dearne Valley Green Heart organisation, and potential creation of a country park in this locality;

- Enhancements to green spaces, green and blue infrastructure throughout the Borough where opportunities arise;

- Tree planting and habitat restoration to be funded through the Government's Green Recovery Challenge Fund.

- Implementation of the ROWIP which identifies and evaluates the needs of the various users and summarises the current levels of public rights of way and recreational countryside access;

- Delivering and developing collaborative investment plans for several major flood alleviation scheme (FAS) projects across the Borough at: Eel Mires Dike (at Laughton Common); Whiston; Catcliffe Pumping Station; Kilnhurst; Rotherham Renaissance (at Templeborough, Rotherham town centre and Parkgate); and Parkgate & Rawmarsh (at Barbot Hall industrial estates, Parkgate and Rawmarsh);

- Requiring developments within the Rotherham Renaissance FAS (RRFAS) extent to contribute towards the creation of new flood risk management infrastructure, extending incrementally 5km along the River Don;

- Avoiding development taking place on areas of land needed for flood structures, next to flood storage reservoirs and for access corridors to the main river and flood structures;

- Supporting nature-based solutions and the EA's catchment-based approach to addressing the climate emergency through the 'Source to Sea' Project) split into the Upper, Middle and Lower Don;

- Supporting climate resilience along the River Don (as part of the Middle Don element) covering Rotherham and providing multiple wider benefits for people and wildlife as part of a whole catchment programme;

- Protecting watercourses and their riparian corridors with new development proposals and providing overall biodiversity net gains through opportunities such as new ponds, hedgerows and shrubs, bat and bird boxes and replacing any 'lost' trees; and

- Funding by developers on a site-specific basis of green, flood defence and water infrastructure requirements to facilitate growth.

4.1.7 Community Facilities

- Enhancing sports and leisure provision through improvements to playing pitches, play facilities, open parks and green spaces; and supporting voluntary sector projects; and

- Relocation of the Central and Thorpe Hesley libraries, redevelopment of the Greasbrough and Wath libraries, improvements to Dinnington Library and providing a new library within the developing community at Waverley.

4.1.8 Emergency Services

- No significant infrastructure requirements have been identified at this stage for the three main emergency services, Police, Fire and Rescue and Ambulance, in fulfilling their duty to serve and deploy resources is based on response times to serve the population.

4.2 Delivery of Sites and Strategic Allocations

At this strategic plan making stage, site specific infrastructure needs only relate to the committed sites to 2025 and primarily the strategic allocations of Bassingthorpe Farm and the continuing build out of Waverley. The identification of further sites to meet needs to 2040 (through updated site allocations) will in the future serve to identify any critical infrastructure needed to unlock allocated development sites (i.e. without the infrastructure the development cannot physically take place).

The Bassingthorpe Farm development will provide around 2,400 new dwellings in the 2025 – 2040 plan period. It also includes 11 hectares of employment land, a primary school and a local centre, including health facilities with green and social

infrastructure. A phasing and delivery strategy has been prepared that identifies the timing, funding and provision of green, social and physical infrastructure, including the primary school and local centre.

Critical infrastructure required to facilitate the delivery of Bassingthorpe Farm has been identified in the Bassingthorpe Farm Infrastructure Delivery Schedule. Whilst many items within the schedule are subject to delivery as part of the development, key items have been identified and now need to be accounted for within this IDP. Items include the provision of a new primary school, a health centre, off-site highway mitigation works, sustainable transport provision, blue and green infrastructure provision to manage surface water and provide open space for new resident for sport and recreational activities and the upgrade to the Aldwarke WwTW. As this scheme progresses, and with the anticipated delivery of a comprehensive scheme, a refresh of the costs associated with delivery of any supporting strategic infrastructure, will be essential alongside a review of the likely funding sources available to support such strategic infrastructure provision.

Officers within the Council continue to work closely with Fitzwilliam Wentworth Estates (the other major landowner in addition to the Council), supported by Homes England, to ensure the ambitions set out in Policy CS1 of the Core Strategy to create a new community in this location, can be achieved.

Build out at Waverley strategic site has progressed and at the end of March 2020 approximately 973 dwellings had been completed on the site with a further 173 under construction. The planning permission is for a total of 3,890 new dwellings, and it is currently estimated that a further 1,200 dwellings will be delivered in the remaining Plan period to 2028. Much of the Significant infrastructure has already been delivered including a new school. However, as the later phases are planned further key items need to be incorporated including further school accommodation and a new health centre, and provision of further sporting and recreational facilities. Discussions remain ongoing about the potential for a new railway station as part of the train tram proposals to extend the line between Sheffield and Lincoln.

4.3 Sub-Regional Infrastructure

The 2020 IDS has identified infrastructure that would serve development in more than one local authority area. In particular, there are joint infrastructure issues with the SCR (particularly Sheffield) especially in terms of transport, utilities, drainage, flood risk and health services. Key sub regional infrastructure includes:

- Key highway and public transport improvement schemes including the SCR Innovation Corridor, Supertram renewal, the KRN and expanding the tram-train network in SCR;

- Highways England's SRN includes the M1 and M18 motorways in the Borough with the A1(M) also nearby;

- Rotherham is part of both Phase 1 and 2 of the Superfast South Yorkshire (SFSY) initiative to provide fibre broadband infrastructure for homes and business premises;

  The waste treatment facility at Manvers serves Rotherham, Doncaster and Barnsley and should have sufficient capacity to process residual waste up to 2040;

- Flood protection measures in Rotherham town centre form one of nine critical flood protection schemes that the SCR Mayoral Combined Authority is investing in;

- Proposed flood measures and nature-based solutions along the Middle Don form part of wider approach to the River Don and its Upper, Middle and Lower sections which in turn forms part of the EA's catchment-based 'Source to Sea' Project; and

- The Dearne Valley Green Heart organisation aims to improve the green spaces of the Dearne Valley for local people and wildlife.

5 Funding and Delivery

5.1 Infrastructure Providers

A wide range of lead agencies for the provision of infrastructure have been identified in the 2020 IDS and set out in the infrastructure delivery schedule at Appendix B. For example these agencies include Rotherham MBC (RMBC), Sheffield City Region (SCR), Sheffield City Council (SCC), Transport for the North (TfN), South Yorkshire Passenger Transport Executive (SYPTE), the Environment Agency (EA), Yorkshire Water, Northern Powergrid, Northern Gas Networks, NHS Rotherham Clinical Commissioning Group (CCG), South Yorkshire Police, Yorkshire Ambulance Service, Superfast South Yorkshire, City fibre, developers and wildlife trusts; town and parish councils and other community trusts.

5.2 Delivery Mechanisms / Sources of Funding

There are a variety of potential funding sources available for the provision of strategic and site-based infrastructure. The following paragraphs provide a list of relevant sources of funding – it is not exhaustive and some smaller funding streams may also be available. The 2020 IDS Schedule identifies a list of infrastructure items that are critical to delivery of the housing growth planned to 2040 and will assist RMBC to understand and prioritise allocation of resources.

5.2.1 Investment by Stakeholders

It is widely recognised that key stakeholders and council departments will have a fundamental role to play in the delivery of all necessary infrastructure identified in the 2020 IDS. The challenge, however, is how to pay for the costs of providing new facilities and infrastructure upfront to ensure that they are delivered in a timely manner to enable developments to proceed and occupation to commence. RMBC and its investment arm the Rotherham Investment and Development Office (RiDO), Asset Management teams, Transport and Highways teams, Waste Management, Open Space and Education functions are all experienced in exploring avenues for other public sector funding and to seek options for prudential borrowing where possible or appropriate.

Clearly with a growth strategy and the additional new homes that are to be delivered, also comes increased revenue costs for service areas such as refuse collection, disposal and recycling, schools, public health, highway maintenance. Some of the revenue pressure will be met in due course when the homes and premises are built and occupied through increased council tax or business rate income. However, with New Homes Bonus currently forecast to close in 2022, and increasing financial pressures on local authorities this will become an increasingly uphill battle.

5.2.2 Transport

Transport funding is broadly made available across three different funding streams:

- National agency settlements;
- Local transport settlements; and
- Competitive bidding rounds.

In the case of the former, funding is usually made available to national agencies such as Highways England (for the SRN) and Network Rail, covering five-year funding cycles – the latest covers Road Investment Strategy 2 (2020-2025) for the former and Control Period 6 (2019-2024) for the latter. In advance of each settlement determination, the Government will normally specify the outcomes that it wishes to see across the five-year period, against which the national agencies will prepare an outline programme and a broad cost envelope, which forms the basis of the final determination settlement.

The agencies will then set out confirmed five-year programmes of major schemes in the Roads Programme and the Rail Network Enhancements Pipeline (RNEP), although in both cases, there are also some smaller designated funding allocations within each programme for use on smaller scale improvements.

Complementary to the SRN programme agreed with Highways England, there is also a programme of improvement schemes across the MRN, agreed by Government on the recommendation of sub-national transport bodies. At present, the current MRN programme runs to 2024.

Therefore, any works on the SRN, MRN or the rail network that is seeking funding from these sources in the future will need to follow this process, or any replacement process that Government sets out.

In terms of local transport settlements, the South Yorkshire Local Authorities have previously received three-year funding settlements as a collective, but with an agreed process of dividing this between the four authorities. Since the signing of the South Yorkshire Devolution Deal, however, future local transport settlements are likely to be at a Sheffield City Region (SCR) level, and will be part of a non-ringfenced funding pot for SCR that can be combined with other budgets. Therefore, there is the opportunity for RMBC to access funding for some of the more local transport improvements in a similar way that has been done recently via the Local Growth Fund. Finally, there are often competitive funding rounds initiated by Government, such as the Transforming Cities Fund (for active travel and public transport improvements) and the Housing Infrastructure Fund. These are likely to continue and could be accessed for any

transport improvements required, although part of such funds may actually be allocated without competition to Mayoral Combined Authorities, such as SCR.

5.2.3 Education

The funding of new schools and additional classroom capacity to support new housing growth is expected to be secured through developer contributions. Typically, the value of the contribution is calculated through a formulaic approach dependent upon the number of new dwellings and child yield. At present this is then subject to a Section 106 agreement and a contribution made by the developer to the council, who is then tasked with delivering the additional education capacity. On large, strategic development sites, where delivery of a new school is essential to meet an identified shortfall in capacity, this is often designed, constructed and delivered by the developer to meet the specific dates and specifications set out by RMBC.

The other principal funding source available to RMBC for school improvements is the Basic Need Fund allocated by the DfE to LAs to contribute towards a sufficiency of school places in areas of need, and where no other funding sources are available. Engagement for the 2020 IDS highlighted a lack of public sector funding for addressing education infrastructure needs and that future provision would be dependent on developer contributions.

5.2.4 Utilities

Electricity, gas and water supply are regulated industries, and providers have a duty under Ofgem regulations to ensure that all new developments are connected to their network as build out progresses.

In the case of installation, costs for the supply to the site are met by the developer. If reinforcement is required, the costs are apportioned between the developer and the distribution network operator (DNO). Speculative developments will be funded fully by the developer, including reinforcement. All services to individual units are costed as part of the development.

Ofgem and Ofwat (the regulatory bodies) often have funding allocations designed to support ground-breaking projects that can be bid for by DNOs. For example, Ofgem has the Network Innovation Competition, an annual competition for flagship innovation projects that will deliver environmental benefits, the Network Innovation Allowance, which funds smaller projects that will deliver benefits to customers, and the Innovation Roll-out Mechanism to fund the roll-out of proven innovations which will support a low carbon future or broader environmental benefits.

With regard to telecommunications, a fibre network is being rolled out across Rotherham, through both SFSY and the City Fibre project with access to the network available to mainstream internet service providers. It is the responsibility of

developers to ensure their new sites are connected and they are advised to engage with infrastructure providers at the earliest opportunity, to ensure the most cost-effective solution. In many cases the infrastructure can be provided free of charge, depending on the size of the development. Consumers are then free to select their provider of choice.

5.2.5 Flooding

Funding sources for the FAS vary by scheme, but would normally include:

- RMBC capital funding;
- EA (Grant in Aid and Natural Flood Management funds);
- Yorkshire Regional Flood and Coastal Committee "Local Levy";
- Department for Transport;
- SCR (various funding streams);
- Network Rail; and
- Private sector contributions.

Investment plans for all FAS projects are currently being developed through discussions between RMBC, the EA and SCR. New developments have to be designed to ensure that any surface water is retained or balanced on site, and subsequent discharge into local water courses controlled to ensure that future flood risk is reduced. Costs associated with onsite mitigations are included within development costs.

5.2.6 Health

The NHS long-term plan sets out key ambitions for health and care over the next 10 years. The plan builds on the policy platform laid out in the NHS five year forward view which articulated the need to integrate care to meet the needs of a changing population and commits, amongst other things, to reducing pressure on A&E departments, establishing primary care networks and to developing fully integrated community-based health care.

Set within a context of an aging population, with increasing incidence of complex health issues, the NHS budget is already under pressure. Where population growth is planned through new housing being delivered the Clinical Commissioning Group is seeking to meet the increasing demand created by these developments and will explore all options for funding to meet local needs arising.

Historic bids for central funding are currently in place for two capital projects to be funded by HM Treasury - a new practice at Waverley to service the population of this significant development, and an expansion of Broom Lane Medical Centre on the edge of the town centre. The Waverley practice will create much needed capacity for the services on the periphery of the development; they have experienced significant list size increases as a result of the planned practice being delayed. Both of these projects are still in the approval stages and are not yet committed investments.

Future necessary expansion of community-based health care accommodation will require all funding options to be considered to meet needs arising. Match funding support for Central Government funding bids will need to be explored. Engagement for the 2020 IDS highlighted that failure to secure adequate infrastructure commitment and funding for the development and expansion of primary care services within future growth plans will place additional pressure on services that are already struggling to cope. An aging population with increasing health needs, a national agenda to move care out of hospitals and closer to home, and a lack of investment in primary care estates nationally mean that general practice is struggling to provide what is required of them from an estate that is not large enough to meet patients' needs in the medium to long term. Work is in place to attempt to ease this pressure, but increasing patient numbers, without matching investment in local infrastructure, will reduce the capacity of services to respond to need.

5.2.7 Developer Contributions

The scale of developer contributions available to pay for infrastructure has long been difficult to predict, given the cyclical economics of the housing market and the impact of viability testing. To help with achieving greater consistency Rotherham Metropolitan Borough Council has commissioned an over-arching SPD focussing on developer contributions. This will review the viability of developments within typologies of sites throughout the Borough and whilst allowing for reasonable developer profit and land values, will identify the potential funding likely to arise through the adoption of Section 106 and CIL contributions. It is also acknowledged that there is a current national review of developer contributions as part of the Planning White Paper with the Government's consideration of a national CIL tariff seeking to give greater transparency and certainty to developers.

5.2.8 Section 106

A potential source of funding is developer contributions secured through a Section 106 Agreement to provide infrastructure related to a specific site. In order to ensure that developments are acceptable to the wider community and do not place excessive additional pressure on local services and facilities, planning obligations or financial contributions are sought to fund enhancement or mitigations to services from the site developer as part of the planning permission. These Section 106 requirements must be relevant and reasonable and therefore are subject to the following tests:

- Necessary to make the development acceptable in planning terms;
- Directly related to the development; and
- Fairly and reasonably related in scale and kind.

In some cases, the developer will be required to provide the infrastructure or facility as part of their development, and in other events it will be necessary for the developer to pay a contribution to the Council for them to commission the necessary works. Section 106 obligations are not expected to impact upon the deliverability of the development, and reasonable developer profit and land value is factored into any viability testing of the level of total contributions.

5.2.9 Community infrastructure Levy

Alongside site specific Section 106 contributions, Rotherham Metropolitan Borough Council also has a CIL in place to help to secure contributions from developers towards more strategic infrastructure, aimed at unlocking growth and wider area developments. This can include new schools or extensions to schools, new highway or transport schemes, health provision, improvements to open space for example.

The current CIL rates are set out in a charging schedule on RMBC's website effective from 3 July 2017. The rates are applied to new retail and housing development, although certain types of development, such as affordable housing, are exempt from CIL. RMBC collects these CIL monies from all schemes within the Borough, and this central funding pot is then available to pay for critical infrastructure. Initially Rotherham had a list of priorities, known as the Regulation 123 list, however the Government amended the CIL Regulations on 1 September 2019. This has removed the legislative basis for the Council's Regulation 123 list, and has placed a new obligation for RMBC to publish an annual Infrastructure Delivery Statement articulating CIL payments received and identifying how the monies have been spent.

RMBC's CIL rates have been capped at a level that has been tested to ensure that all schemes within the Borough remain viable. The collected CIL pot, however, cannot fund all necessary infrastructure projects identified in the IDS and prioritisation together with continuing to explore additional funding sources will be necessary. As mentioned above, a current review of the evidence base which underpins the Section 106 and CIL charging rates viability testing is currently underway to ensure that Rotherham's approach to developer contributions remains up-to-date and relevant.

5.2.10 Public Sector Funding

Homes England is an executive non-departmental public body, sponsored by the Ministry of Housing, Communities and Local Government. Homes England is the Government's housing accelerator, tasked with building better homes faster and

seeking to drive positive market change. Alongside a requirement to release public sector land for new housing development, the agency also has significant annual budgets targeted at unlocking further land for housing development. In the past this has included specific programmes for providing critical infrastructure (HIF), Local Authority Accelerated Construction (LAAC) which supported enabling works on sites which otherwise would be unable to move forwards, and others to fund Brownfield sites where the abnormal costs render the sites undeliverable.

In order to be well placed to access Homes England funding, a local authority needs to build a good case, with a strong evidence base underpinning any new infrastructure or gap funding request. This 2020 IDS and Schedule will be a valuable tool to identify key infrastructure projects that could unlock development potential, and to begin dialogue with Homes England when new funding streams become available for bids.

It is critical to work alongside the wider SCR, partnering with neighbouring local authorities to prioritise and collaborate on joint funding bids from Government and through devolution funding programmes such as the Mayoral Fund. Local Enterprise Partnerships are well placed to articulate business needs and broker negotiations and discussions on behalf of the private sector with local authorities, Government and other key partners such as the utility providers to identify, budget for and lobby for funding to support infrastructure delivery

Infrastructure Place Packages have been developed with Local Authorities in the SCR Mayoral Combined Authority. The SCR Infrastructure Board on the 9th July 2019 resolved to support the development of Infrastructure Place Packages with local authorities through a series of workshops. The rationale was to develop an integrated 'place-based approach' for accelerating the growth and regeneration of the SCR's key Growth Areas, and identify a robust pipeline of infrastructure schemes which can be ready for delivery once future SCR funding is confirmed. The Infrastructure Place Packages have been developed alongside and helped inform the preparation of the emerging new Strategic Economic Plan. Seven specific Growth Area (GA) Infrastructure Place Packages are being developed and include packages for Rotherham Town Centre and Rotherham AMID Corridor and Extension.

6 Conclusions and Next Steps

The previous Infrastructure Delivery Study (2012 IDS) was published in support of the Core Strategy 2014 which sets out the scale and broad locations for delivering new housing and employment within the period 2013 to 2028. This 2020 IDS serves to inform and support the development of a Core Strategy Partial Update, which will look and plan ahead to 2040. Future infrastructure provision in Rotherham will be essential for delivering growth and development sites to 2040 as well as to achieving the 2040 net zero carbon target across the borough, enabling economic renewal and recovery and supporting healthy and thriving communities.

Engagement with infrastructure and service providers is essential for an effective IDS, producing a sound Local Plan and ultimately facilitating sustainable, deliverable and resilient development. This update report is based on the input of lead agencies and providers and has critically reviewed and updated the previous 2012 IDS. This ensures that a robust evidence base is in place - identifying the range of infrastructure provision required to support sustainable communities and the infrastructure required to enable the planned growth of the Borough of Rotherham to be delivered (as included in the two potential development scenarios). The 2020 IDS will assist the Council's understanding of infrastructure requirements for bringing sites forward for development, to understand the priority of key and critical items which will have significant impact on delivery, and making decisions on planning applications.

Significant infrastructure improvements have taken place since the 2012 IDS was produced and key strategic investments (such as the Manvers waste treatment facility, Halfpenny Link to Meadowhall and tram train) will continue to support and enable growth to 2040. Improving and enhancing existing infrastructure/facilities is a key theme of the further requirements to 2040 to accommodate the growth envisaged by the development scenarios.

6.1 Infrastructure Costs

Appendix B sets out the known estimated costs of infrastructure projects. In a number of cases estimated costs remain to be confirmed (TBC), as costs become available these can be updated. All of the infrastructure projects would be required under both Scenarios 1 and 2 (with just the exception of one transport project, M18 Junction 1 improvements which would only be required for Scenario 2). The anticipated costs have been developed from a number of sources, including:

- RMBC / infrastructure provider estimates;
- Pro-rata costs of similar infrastructure (e.g. the active travel corridors and provision of new primary schools);
- Bassingthorpe Farm Masterplan.

The anticipated costs are provided in 2020 prices – where estimates that precede this date were provided, they have been uplifted to 2020 prices on the basis of a 5% per annum increase, reflecting the Construction Price Index over the last few years. Table 4 below summarises the total costs included in the infrastructure schedule at Appendix B for the eight categories of infrastructure. Key anticipated costs include:

- Around £300 million of transport investment, excluding the larger SCR/SYPTE-led projects such as the SCR Innovation Corridor and Supertram renewal (which total £620 million);
- An estimated £30 million to deliver the required education provision;
- Nearly £8 million for health facilities;
- Around £48 million for the priority Flood Alleviation Schemes, with a requirement for a culvert renewal programme at various locations across the Borough at an approximate cost of £2 million.

There will also be other costs related to utilities infrastructure, although these are often borne by the providers themselves through their regulated asset base arrangements.

Table 4: Infrastructure Costs

Infrastructure Type	Cost of Infrastructure Interventions	Non-Area Specific Infrastructure Intervention Costs	Area Specific*** Infrastructure Intervention Costs
Transport	£328,359,163 * (£948,359,163) **	£113,900,000 * (£733,900,000) **	£214,459,163
Utility	£51,400,000	-	£51,400,000
Education	£29,970,000	-	£29,970,000
Health	£7,900,000	-	£7,900,000
Waste	-	-	-
Green & Blue Infrastructure	£61,600,000	£28,900,000	£32,700,000
Community	£1,746,800	£1,250,000	£496,800
Emergency Services	£1,100,000	£1,100,000	-
Total	**£482,075,963***	**£145,150,000***	**£336,925,963**

*excludes **includes SCR costs for Supertram Renewal & Sheffield City Region Innovation Corridor *** costs relate to specific settlements/urban areas identified in the development scenarios

As a current estimate, around £480 million of infrastructure projects are identified in the 2020 Infrastructure Delivery Schedule (Appendix B), with the majority relating to transport. This is not necessarily unusual and there are some clear funding routes for

transport schemes, albeit there will still be competition for funding, even in a more devolved governance arrangement across SCR. Funding routes are also available for significant utility infrastructure projects and for Flood Alleviation Schemes. Education projects, sport and leisure projects, including access to the Rights of Way network of footpaths, cycleways and bridleways, there are aspirations for new woodland planting and the potential for the creation of a new country park in the Dearne Valley and future community and primary health facilities are currently unfunded infrastructure categories/types. The lack of public funding, particularly highlighted for education and primary health facilities, and the 'soft' infrastructure that builds communities, and the associated potential reliance on development related funding, have been highlighted.

70% of the infrastructure project costs in the schedule are related to requirements for specific settlements/urban areas identified under the development scenarios (see figures 3 & 4 in Section 2 and Appendix A).

6.2 Infrastructure Critical to Delivering the Development Scenarios and Creating Attractive & Liveable Communities

At this stage the Core Strategy Partial Update is examining potential different levels of growth for different settlements/areas to 2040, taking into account existing housing site allocations which provide sufficient supply to 2025. No infrastructure issue has been identified through the IDS 2020 refresh that would prevent development taking place across the Borough of Rotherham or in particular areas or settlements. There may be infrastructure related phasing issues to address looking to 2040, transport and utilities infrastructure are usually linked to triggers controlling the commencement of development activity. This includes essential services that are required to be delivered in advance of residential/commercial development.

Development on certain areas of land and access corridors within the extent of FASs may need to be avoided to deliver and access flood infrastructure. As regeneration and development sites are brought forward land may be needed to construct, inspect, maintain and operate FAS and/or Surface Water Management hard and soft infrastructure. This could include engineering structures, and access routes to them, and/or areas where water needs to flow or be stored during a flood event.

The IDS 2020 refresh highlights a wide range of infrastructure provision that will be needed to deliver development and growth – and help to deliver economic recovery, address climate change and plan effectively for a post-COVID-19 world. All the infrastructure identified in this IDS 2020 Update has an important role to play in delivering and supporting sustainable communities and making successful places.

In both development scenarios set out in Section 2, the main focus of growth is the Rotherham Urban Area, which includes the Bassingthorpe Farm Strategic Allocation,

Wath upon Dearne, Dinnington/Anston, Waverley, Bramley/ Wickersley and Maltby/ Hellaby as all form part of the future development focus under both scenarios.

Of the £336m area specific infrastructure costs identified, over 40% (£143m) are associated with the Rotherham Urban Area. Transport and utility (Superfast South Yorkshire and City Fibre) infrastructure projects account for much of the costs attributable to the Rotherham Urban Area (£65m and £51m respectively). The Rotherham Renaissance Flood Alleviation Scheme is also significant in cost (and wider) terms (£20m).

As set out in Section 4 critical infrastructure is required to facilitate the delivery of Bassingthorpe Farm. The provision of a new primary school, a health centre, off-site highway mitigation works, green infrastructure, sustainable transport provision, and the upgrade to the Aldwarke WwTW are all included and reflected in this refresh of the IDS. Infrastructure projects included in the Infrastructure Delivery Schedule at Appendix B, that affect Bassingthorpe Farm, approach £50m (nearly half of which are transport related), with some further costs still to be confirmed.

Build out at Waverley strategic site has progressed and much of the significant infrastructure has already been delivered including a new school. As the later phases are planned, further key items need to be incorporated including further school accommodation and a new health centre. Infrastructure costs associated with Waverley and included in the 2020 Infrastructure Delivery Schedule, total just under £25m, with community infrastructure costs to be confirmed. Discussions also remain ongoing about the potential for a new railway station as part of the train tram proposals to extend the line between Sheffield and Lincoln.

6.3 Next Steps

There are opportunities for RMBC to take ownership and further develop the outputs from this commission as a means of tackling the delivery of the infrastructure necessary to support the growth aspirations of Rotherham. To build on the work done in this IDS 2020 update, and to ensure that RMBC is in the best possible position to take an early view as to which infrastructure schemes it may seek to put forward for potential future competitive funding rounds, or to allow the work in progress to be used to respond to any planning applications, recommendations are put forward:

Based on an easy to access spreadsheet approach initially, the first version of a refreshed 2020 Infrastructure Delivery Schedule has been prepared and is included at Appendix B. It identifies the key infrastructure schemes, areas affected, timeframes, estimated cost and lead agency known at the time of writing.

However, for some areas or topic themes such as community infrastructure funding, there is currently limited knowledge available and gaps in this information are required to be filled in future years. Continued engagement can help to support

collaborative approaches for infrastructure delivery and to raise the profile of particular funding challenges.

Continued engagement with the key stakeholders continues, possibly through the formation of an Infrastructure Task Force and annual Stakeholder Forum (recommendation 1).

The 2020 Infrastructure Delivery Schedule should be maintained and updated as a 'live' document by RMBC through ongoing/future liaison with stakeholders and the regular monitoring of progress across all infrastructure areas (Recommendation 2).

The 2020 IDS and its Infrastructure Delivery Schedule is supported by plans showing the 'key infrastructure interventions' across Rotherham for each development scenario, overlain on the main potential development locations, included at Appendix C. The IDS has the potential to be a more useful tool for discussions with Members and partner organisations and allow developers an upfront view of the likely infrastructure requirements of bringing forward various sites, as well as being a powerful collaborative tool with other partner agencies who, from the work done to date, we have found, can be sometimes difficult to engage with.

Consideration should be given to developing the infrastructure intervention plans developed in the future as an open-source document, initially using a GIS-based record of key infrastructure needs (Recommendation 3).

It will be important to carry out a detailed review of infrastructure projects identified in the schedule, to further examine how many housing units each project would unlock and when. This will inform any phasing implications and will help to build a case for future funding rounds, in particular for programmes such as the Government Housing Infrastructure Fund or its successors, where it is essential to demonstrate that an allocation will help accelerate the construction of new homes at scale.

The implications of future infrastructure needs and projects on the delivery of housing and other development should be assessed to establish any phasing implications for the planning of future growth (Recommendation 4).

The SCR Growth Area Infrastructure Place Packages will be developed with local authorities to form high level Blueprints for each Growth Area. These will set out high level ambitions, outputs and outcomes for each Growth Area, supporting the delivery of the new SEP and the post Covid-19 recovery. The Blueprints will inform the development of Strategic Business Cases for the Growth Area programmes, which will include individual schemes to deliver the Growth Areas' ambitions. This approach is developing an up-to-date pipeline of infrastructure investments so that new funding programmes can be accessed when they become available and so that public investment can be accelerated.

This 2020 IDS should be used as evidence to inform the Blueprints for Growth Areas and support the SCR infrastructure place packages approach (Recommendation 5).

Appendix A

Development Scenario Summary Tables

Rotherham Local Plan: Potential Future Growth Scenarios (August 2020)

The table below shows the number of **dwellings** under construction as of 2019 and additional dwellings expected to be constructed to 2025. Scenarios 1 and 2 present two options for growth over the proposed new Local Plan period of 2025 – 2040. These are indicative and could change in light of future evidence and consultation. See notes and assumptions at end of table. Yellow cells highlight settlements where the target or capacity requires land in addition to current Local Plan residential allocations.

Settlement	Dwellings under construction (as of 2019)	Dwellings expected 2019 – 2025	Scenario 1: Local Housing Need Based		Scenario 2: Capacity Based		Difference in dwellings between scenarios 1 and 2
			Dwellings target 2025 - 2040	Note	Capacity (dwellings) 2025 - 2040	Note	
Rotherham urban area (inc. Bassingthorpe Farm Strategic Allocation)	550	374	3798	Growth expected to be accommodated on existing Local Plan allocations	5692	Growth expected to be accommodated on existing Local Plan allocations (4,992 dwellings) and safeguarded land (700 dwellings)	+1894
Dinnington, Anston and Laughton Common (inc. Broad Location For Growth)	69	40	883	Growth expected to be accommodated on existing Local Plan allocations	1824	Growth expected to be accommodated on existing Local Plan allocations (960 dwellings) and safeguarded land (864 dwellings)	+941
Wath-upon-Dearne, Brampton Bierlow and West Melton	25	79	883	Land for approximately 21 homes may be required beyond existing Local Plan allocations; however, it is expected that this will be achieved through windfall development on other non-housing allocation sites.	1640	Growth expected to be accommodated on existing Local Plan allocations (862 dwellings) and safeguarded land (778 dwellings)	+757
Bramley, Wickersley and Ravenfield Common	147	21	618	Growth expected to be accommodated on existing Local Plan allocations	1379	Growth expected to be accommodated on existing Local Plan allocations (730 dwellings) and safeguarded land (649 dwellings)	+761
Waverley	579	280	795	Growth expected to be accommodated on existing Local Plan allocations	800	Growth expected to be accommodated on existing Local Plan allocations	+5
Maltby and Hellaby	96	26	442	Growth expected to be accommodated on existing Local Plan allocations	1093	Growth expected to be accommodated on existing Local Plan allocations and safeguarded land	+651
Aston, Aughton and Swallownest	146	17	353	Growth expected to be accommodated on existing Local Plan allocations	647	Growth expected to be accommodated on existing Local Plan allocations (660 dwellings) and safeguarded land (433 dwellings)	+294
Swinton and Kilnhurst	227	12	353	Land for approximately 250 homes may be required beyond existing Local Plan housing allocations	102	This figure is lower than the figure identified in scenario 1 as it represents the capacity of remaining Local Plan allocations, plus the fact that no additional safeguarded land is identified within this settlement.	-251
Wales and Kiveton Park	56	13	265	Growth expected to be accommodated on existing Local Plan allocations	725	Growth expected to be accommodated on existing Local Plan allocations (368 dwellings) and safeguarded land (357 dwellings)	+460
Catcliffe, Treeton and Orgreave	94	6	88	Growth expected to be accommodated on existing Local Plan allocations	158	Growth expected to be accommodated on existing Local Plan allocations	+70
Thorpe Hesley	6	152	88	Land for approximately 70 homes may be required beyond existing Local Plan housing allocations	63	This figure is lower than the figure identified in scenario 1. Growth expected to be accommodated on existing Local Plan allocations (17 dwellings) and safeguarded land (46 dwellings)	-25
Thurcroft	95	6	177	Land for approximately 140 homes may be required beyond existing Local Plan housing allocations	40	This figure is lower than the figure identified in scenario 1 as it represents the capacity of remaining Local Plan allocations, plus the fact that no additional safeguarded land is identified within this settlement.	-137

Settlement	Dwellings under construction (as of 2019)	Dwellings expected 2019 – 2025	Scenario 1: Local Housing Need Based		Scenario 2: Capacity Based		Difference in dwellings between scenarios 1 and 2
			Dwellings target 2025 - 2040	Note	Capacity (dwellings) 2025 - 2040	Note	
Todwick	10	16	88	Land for approximately 50 homes may be required beyond existing Local Plan housing allocations	40	This figure is lower than the figure identified in scenario 1 as it represents the capacity of remaining Local Plan allocations, plus the fact that no additional safeguarded land is identified within these settlements.	-48
Harthill							
Woodsetts							
Laughton en le Morthen							
Harley							
Green belt villages	15	43	0	No additional growth planned.	0	No additional growth planned.	0
			Total: 8,833		**Total: 14,203**		**Total: +5,370**
Windfalls @180 dwellings per year (see note)		+1,080	+2,700		+2,700		
			Total: 11,533		**Total: 16,903**		

Notes and assumptions

Scenario 1: Local Housing Need based

- Uses the current Local Housing Need calculation as of 2020 for the period 2025 – 2040 (8,832 dwellings). This figure could change in future.
- Housing growth has been distributed according to the existing settlement hierarchy and percentage distribution in the Core Strategy except:
  - the percentage for Waverley has been reduced from 17% to 9%. The original figure reflected a commitment at the time of Core Strategy adoption and is not considered appropriate in light of the settlement context. 9% is considered to represent a reasonable figure going forward given the extant planning permission.
  - The remaining 8% has been distributed between the Rotherham Urban Area and Principal Settlements for Growth.
- Dwellings target 2025 – 2040 is based solely on the distribution of the LHN figure. Where existing allocations provide capacity in excess of the LHN figure this additional capacity is not taken into account. Where additional land is required this does not take account of any existing safeguarded land which could come forward following review of the Sites and Policies document.

Scenario 2: Capacity based

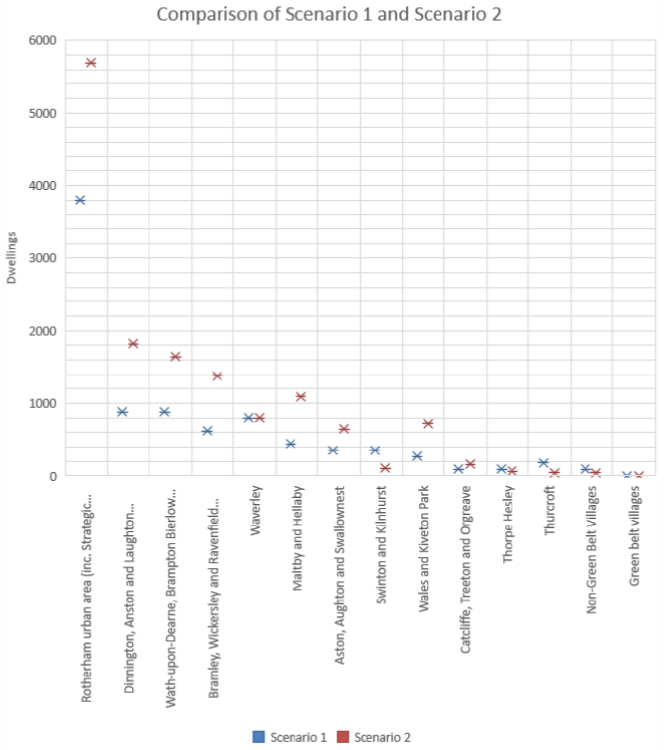
- Uses remaining capacity of Local Plan allocations at 2019, plus the capacity of all safeguarded land sites which could come forward following an update of the Sites and Policies document.
- This scenario would deliver 14,203 dwellings between 2025 and 2040.
- This scenario does not involve the release of additional land beyond safeguarded land already identified in the Sites and Policies document.

Windfalls:

The Local Plan assumes that windfall development (i.e. development on sites not allocated for residential development) will take place at approximately 180 dwellings per year across the borough to 2028 (large and small sites). Given their nature it is unknown where these will occur, and as such they cannot be attributed to specific settlements. However, the additional windfall development has been reflected the table above, based on 180 dwellings per year projected forward over the plan period; equating to an additional 1,080 homes between 2019 and 2025, and an additional 2,700 homes between 2025 and 2040 in scenarios 1 and 2.

Safeguarded land:

Land which has been removed from the Green Belt but which will require a review of the Local Plan in order to be developed.



Future Growth Scenario: Employment land

Settlement	Employment target (Adopted) (Ha)	Capacity of allocations at adoption (2018) (ha)	Land with planning permission and under construction as at 2020	Remaining capacity (allocated sites) (ha)
Rotherham urban area (including Bassingthorpe Farm Strategic Allocation)	71	65	3	62
Dinnington, Anston and Laughton Common (including Dinnington East Broad Location For Growth)	38	28		28
Wath-upon-Dearne, Brampton Bierlow and West Melton	16	12	1	12
Bramley, Wickersley and Ravenfield Common	16	0		0
Waverley	42	36	1	36
Maltby and Hellaby	5	54.23		54
Aston, Aughton and Swallownest	19	15.72		16
Swinton and Kilnhurst	0	1.54		2
Wales and Kiveton Park	9	32.34		32
Catcliffe, Treeton and Orgreave	12	12.4		12
Thorpe Hesley	0	0		0
Thurcroft	7	6.17		6
Todwick Harthill Woodsetts Laughton en le Morthen Harley	0	0		0
Green belt villages	0	0		0
Total	235	264	5	261

Note:
A significant amount of land remains allocated for employment use. Further work would be required to analyse employment data in greater detail. However, in view of the remaining land available it is considered at present that the current allocations will be sufficient to meet needs to 2040. As such no further scenarios have been developed.

Appendix B

2020 Infrastructure Delivery Study Schedule

ROTHERHAM 2020 IDS - INFRASTRUCTURE DELIVERY SCHEDULE

Rotherham local plan

Rotherham Metropolitan Borough Council

Type	Sub-Category	Infrastructure Project	Area Specific (Y/N)	Area(s) Affected	Timeframe	Estimated Cost	Lead Agency
	Highways	Bassingthorpe Farm Access Road	Y	Bassingthorpe Farm		£2,400,000	Developer
		A629 / Fenton Road Roundabout	Y	Bassingthorpe Farm		£2,500,000	RMBC
		Ickles Roundabout	Y	Rotherham Urban Area		£7,500,000	RMBC
		A631 / A6123 Worrygoose Roundabout	Y	Rotherham Urban Area		£6,000,000	RMBC
		B6060 / B6463 Dinnington Roundabout	Y	Dinnington, Anston and Laughton Common		£750,000	RMBC
		A633 / Wentworth Road Roundabout	Y	Rotherham Urban Area		£500,000	RMBC
		A631 / B6060 Wickersley Roundabout	Y	Bramley, Wickersley and Ravenfield Common		£4,500,000	RMBC
		M18 Junction 1 Improvements	Y	Maltby and Hellaby		£500,000	RMBC / HE
		Addison Road Improvements	Y	Maltby and Hellaby		£1,500,000	RMBC
		B6059 / Kiveton Lane / Hard Lane Improvements	Y	Wales and Kiveton Park		£400,000	RMBC
		Gate Inn Crossroads Swinton	Y	Swinton and Kilnhurst		£250,000	RMBC
		A6123 Stag Roundabout / Wickersley Road Corridor Improvements	Y	Rotherham Urban Area		£2,000,000	RMBC
		A631 Canklow Bridge Replacement	N			£30,000,000	RMBC
		A57 / B6463 Red Lion Roundabout	Y	Dinnington, Anston and Laughton Common		£500,000	RMBC
		Sheffield City Region Innovation Corridor	N			£220,000,000	SCC / SCR
		A57 South Anston Improvements	N			> £2,500,000	RMBC / SCR
		St Annes Roundabout	N			£5,000,000	RMBC
		Greasborough Corridor - Coach Road Improvement	Y	Bassingthorpe Farm	2021	£2,459,163	RMBC
		Greasborough Corridor - The Whins Improvement	Y	Bassingthorpe Farm	2022	£2,500,000	RMBC
		A630 Parkway Widening	N		2022	£46,000,000	RMBC / HE
	Public Transport	Rotherham to Dearne Valley Bus Priority	Y	Rotherham Urban Area		£2,000,000	RMBC / SYPTE
		Rotherham to Maltby Bus Priority	Y	Bramley, Wickersley and Ravenfield Common / Maltby and Hellaby		£3,150,000	RMBC / SYPTE
		New Rail Station at Waverley	Y	Waverley	2025	£14,000,000	SCR / SYPTE
		Supertram Renewal	N		2025-2030	£400,000,000	SCR / SYPTE
		Tram-Train Extension	N		2025-2030	tbc	TfN / SCR / SYPTE
		Rotherham Mainline Rail Station	N		2025-2030	£30,000,000	TfN / SCR / SYPTE
	Active Travel	Rotherham to Wickersley Active Travel Corridor	Y	Rotherham Urban Area		£20,300,000	RMBC
		Rotherham to Whiston Active Travel Corridor	Y	Rotherham Urban Area		£11,600,000	RMBC
		Rotherham to Thrybergh Active Travel Corridor	Y	Rotherham Urban Area		£14,700,000	RMBC
		Rotherham to Thorpe Hesley Active Travel Corridor	Y	Thorpe Hesley		£21,200,000	RMBC
		Rotherham to Greasborough Active Travel Corridor	Y	Bassingthorpe Farm		£13,100,000	RMBC
		Maltby to Hellaby Active Travel Corridor	Y	Maltby and Hellaby		£16,500,000	RMBC
		Dearne Valley Active Travel Corridor	Y	Wath-upon-Dearne, Brampton Bierlow and West Melton		£18,100,000	RMBC
		Rotherham - Brinsworth - AMID Active Travel Corridor	Y	Catcliffe, Treeton and Orgreave / Sites in Sheffield		£36,500,000	RMBC / SCC
		Rotherham Town Centre Cycle Box	Y	Rotherham Urban Area		£2,900,000	RMBC
		Forge Island Footbridge	Y	Rotherham Urban Area		£1,200,000	RMBC
		New Parkway Bridge	Y	Waverley		£7,500,000	RMBC / SCC
		Bassingthorpe Farm Cycle Connectivity	Y	Bassingthorpe Farm		£350,000	RMBC
					TOTAL	**£948,359,163**	

Note: Shaded cells indicate additional infrastructure requirements for Scenario 2 only

ROTHERHAM 2020 IDS - INFRASTRUCTURE DELIVERY SCHEDULE

Type	Sub-Category	Infrastructure Project	Area Specific (Y/N)	Area(s) Affected	Timeframe	Estimated Cost	Lead Agency
Utilities	Gas	Medium Pressure Gas Main Extension (near Carr Hill and Ginhouse Lane)	Y	Bassingthorpe Farm	2020-2025	tbc	Northern Gas Networks
	Electricity	Future Projects arising from Emerging Thinking 2020 and Subsequent Business Plan	N		Whole Plan period		Northern Powergrid
		District Heating Network	Y	Rotherham Urban Area	Whole Plan period		RMBC
	Water	Aldwarke Wastewater Treatment Works (WwTW) Upgrade	Y	Bassingthorpe Farm	2025-2030	tbc	Yorkshire Water
		Treeton Sewerage Plant Improvements	N			tbc	Yorkshire Water
	Broadband and Telecoms	Superfast South Yorkshire Phase 2, including 958 properties in Rotherham	Y	Rotherham Urban Area	2021	£22,400,000	Superfast South Yorkshire
		City Fibre Project	Y	Rotherham Urban Area	2020-2023	£29,000,000	City Fibre
		Hard to Reach Project - Thurcroft and Wickersley	Y	Thurcroft / Bramley, Wickersley and Ravenfield Common			Openreach
					TOTAL	**£51,400,000**	

ROTHERHAM 2020 IDS - INFRASTRUCTURE DELIVERY SCHEDULE

Type	Sub-Category	Infrastructure Project	Area Specific (Y/N)	Area(s) Affected	Timeframe	Estimated Cost	Lead Agency
	Primary / Early Years	Bassingthorpe Farm - New Primary and Nursery	Y	Bassingthorpe Farm	2028-2030	£8,500,000	RMBC
		Extension to Greasbrough Academy/Thornhill Primary	Y	Bassingthorpe Farm	2024-2025	£850,000	RMBC
		Dinnington, Anston and Laughton Common - Extension (broad area)	Y	Dinnington, Anston and Laughton Common	Whole Plan period	£850,000	RMBC
		Extension to Listerdale Junior Academy	Y	Bramley, Wickersley and Ravenfield Common	Whole Plan period	£850,000	RMBC
		Extension to Treeton Primary	Y	Catcliffe, Treeton and Orgreave	Whole Plan period	£850,000	RMBC
		Aston, Aughton and Swallownest - Extension (broad area)	Y	Aston, Aughton and Swallownest	Whole Plan period	£850,000	RMBC
		Maltby - Extension (broad area)	Y	Maltby and Hellaby	Whole Plan period	£850,000	RMBC
		Extension to Wales Primary	Y	Wales and Kiveton Park	Whole Plan period	£850,000	RMBC
		Extension to Wath Victoria	Y	Wath-upon-Dearne, Brampton Bierlow and West Melton	Whole Plan period	£850,000	RMBC
		Extension to Whiston Worrygoose	Y	Rotherham Urban Area	Whole Plan period	£850,000	RMBC
		Extension to Whiston Infant & Junior/Sitwell Infant & Junior	Y	Rotherham Urban Area	Whole Plan period	£850,000	RMBC
		Thrybergh - Extensions	Y	Rotherham Urban Area	Whole Plan period	£850,000	RMBC
		Extension to Thorpe Hesley Primary	Y	Thorpe Hesley	Whole Plan period	£850,000	RMBC
		Extension to Ravenfield Primary	Y	Bramley, Wickersley and Ravenfield Common	Whole Plan period	£850,000	RMBC
	Secondary	Extension to Wingfield	Y	Bassingthorpe Farm	2028-2030	£1,900,000	RMBC
		Extension to Wickersley Academy	Y	Bramley, Wickersley and Ravenfield Common	Whole Plan period	£930,000	RMBC
		Extension to Maltby Academy	Y	Maltby and Hellaby	Whole Plan period	£930,000	RMBC
		Extension to Aston Academy	Y	Aston, Aughton and Swallownest	Whole Plan period	£930,000	RMBC
		Extension to Wales High School	Y	Wales and Kiveton Park	Whole Plan period	£930,000	RMBC
		Extension to Brinsworth Academy	Y	Catcliffe, Treeton and Orgreave	Whole Plan period	£150,000	RMBC
		Maltby - Extension (broad area)	Y	Maltby and Hellaby	Whole Plan period	£930,000	RMBC
		Extension to Rawmarsh Community	Y	Rotherham Urban Area	Whole Plan period	£930,000	RMBC
		Extension to Oakwood High	Y	Rotherham Urban Area	Whole Plan period	£930,000	RMBC
		Extension to Thrybergh Academy	Y	Rotherham Urban Area	Whole Plan period	£930,000	RMBC
		Extension to St Pius X	Y	Wath-upon-Dearne, Brampton Bierlow and West Melton	Whole Plan period	£930,000	RMBC
	SEND & SEMH	Rawmarsh - Special Educational Needs and Disability (SEND) and Social, Emotional and Mental Health (SEMH) (Primary and Secondary phase)	N		Whole Plan period	tbc	RMBC
		Dinnington - Special Educational Needs and Disability (SEND) and Social, Emotional and Mental Health (SEMH) (Primary and Secondary phase)	N		Whole Plan period	tbc	RMBC
					TOTAL	**£29,970,000**	

ROTHERHAM 2020 IDS - INFRASTRUCTURE DELIVERY SCHEDULE

Type	Sub-Category	Infrastructure Project	Area Specific (Y/N)	Area(s) Affected	Timeframe	Estimated Cost	Lead Agency
Health	Healthcare	Expansion of Broom Lane Medical Centre	Y	Rotherham Urban Area		tbc	NHS Rotherham CCG
		New Practice at Waverley	Y	Waverley		£2,000,000	NHS Rotherham CCG
		Bassingthorpe Farm Surgery	Y	Bassingthorpe Farm		£2,400,000	NHS Rotherham CCG
		New Health Centre at Dinnington	Y	Dinnington, Anston and Laughton Common		£3,500,000	NHS Rotherham CCG
					TOTAL	**£7,900,000**	

ROTHERHAM 2020 IDS - INFRASTRUCTURE DELIVERY SCHEDULE

Type	Sub-Category	Infrastructure Project	Area Specific (Y/N)	Area(s) Affected	Timeframe	Estimated Cost	Lead Agency
Waste	Disposal						
	Collection						
	Provision						

TOTAL **£0**

Type	Sub-Category	Infrastructure Project	Area Specific (Y/N)	Area(s) Affected	Timeframe	Estimated Cost	Lead Agency
Green and Blue Infrastructure	Parks and Recreation	Dearne Valley Eco-Vision - Eco-Park	N			tbc	BMBC / DMBC / RMBC
		Dearne Valley Green Heart - including improvements to priority habitats and conservation assets such as Old Moor, Trans Pennine Trail and the River Dearne, and in particular the washlands and reclaimed industrial areas	N			tbc	Yorkshire Wildlife Trust / Royal Society for Protection of Birds / Environment Agency / Natural England / Forestry Commission / Doncaster Biodiversity Trust/ BMBC / DMBC / RMBC
		Neighbourhood Green Space	Y	Bassingthorpe Farm		£7,000,000	Developer
		Local Green Space	Y	Bassingthorpe Farm		£700,000	Developer
		New and Improved Allotments	Y	Bassingthorpe Farm		£2,500,000	Developer
	Flood Risk and Flooding	Eel Mires Dike (at Laughton Common, Dinnington) Flood Alleviation Scheme (FAS)	N		Timescales for all of the FAS projects cannot be confirmed until Partnership Funding allocations (from various parties) has been provided to RMBC - it is hoped that several can be delivered in the next 10 years	£3,000,000	EA / RMBC
		Whiston Brook FAS (at Whiston)	N			£4,000,000	EA / RMBC
		Catcliffe Pumping Station (at Catcliffe)	N			£5,000,000	EA / RMBC
		Kilnhurst FAS (at Kilnhurst for business and the primary school)	N			£4,000,000	EA / RMBC
		Rotherham Renaissance Flood Alleviation Scheme (RRFAS) (at Templeborough, Rotherham town centre and Parkgate)	Y	Rotherham Urban Area	In stages - around 1.6km of RRFAS is planned to be implemented between 2019 to 2022 in parallel with regeneration opportunities in Rotherham town centre	£20,000,000	EA / RMBC
		Parkgate and Rawmarsh FAS (at Barbot Hall Industrial Estates, Parkgate and Rawmarsh)	N			£10,000,000	EA / RMBC
		Culverts Renewal Programme (various locations across the Borough)	N			£2,000,000	EA / RMBC
		Herringthorpe Valley FAS	N			tbc	
		Maltby Surface Water FAS	N			tbc	
		Dearne Washlands Optimisation FAS	N			tbc	

		Kilnhurst Ings Improvement	N			tbc	Sheffield and Rotherham Wildlife Trust
		Source to Sea Project Middle Don Section	N		Early Stages	tbc	EA
		A633 and A6123 Highways Resilience Scheme	N			tbc	RMBC
	Woodland	Mature Woodland	Y	Bassingthorpe Farm		£2,500,000	Developer
	Public Rights of Way	Trans Pennine Trail Recreation and Active Transportation Project: 1.Path Improvements and new PROW links including: •all legal agreements required •surfacing and furniture •new stiles •signage 2.Consultation, Training and Development of volunteers: •Local Access Forum •Public 3.Promotion including: •website •leaflets 4.Access Provision for: •People with mobility restrictions •cyclists •horse riders 5.Implementation Officer	N		A five year project	£900,000	RMBC / Local Access Forum / Volunteers
					TOTAL	**£61,600,000**	

ROTHERHAM 2020 IDS - INFRASTRUCTURE DELIVERY SCHEDULE

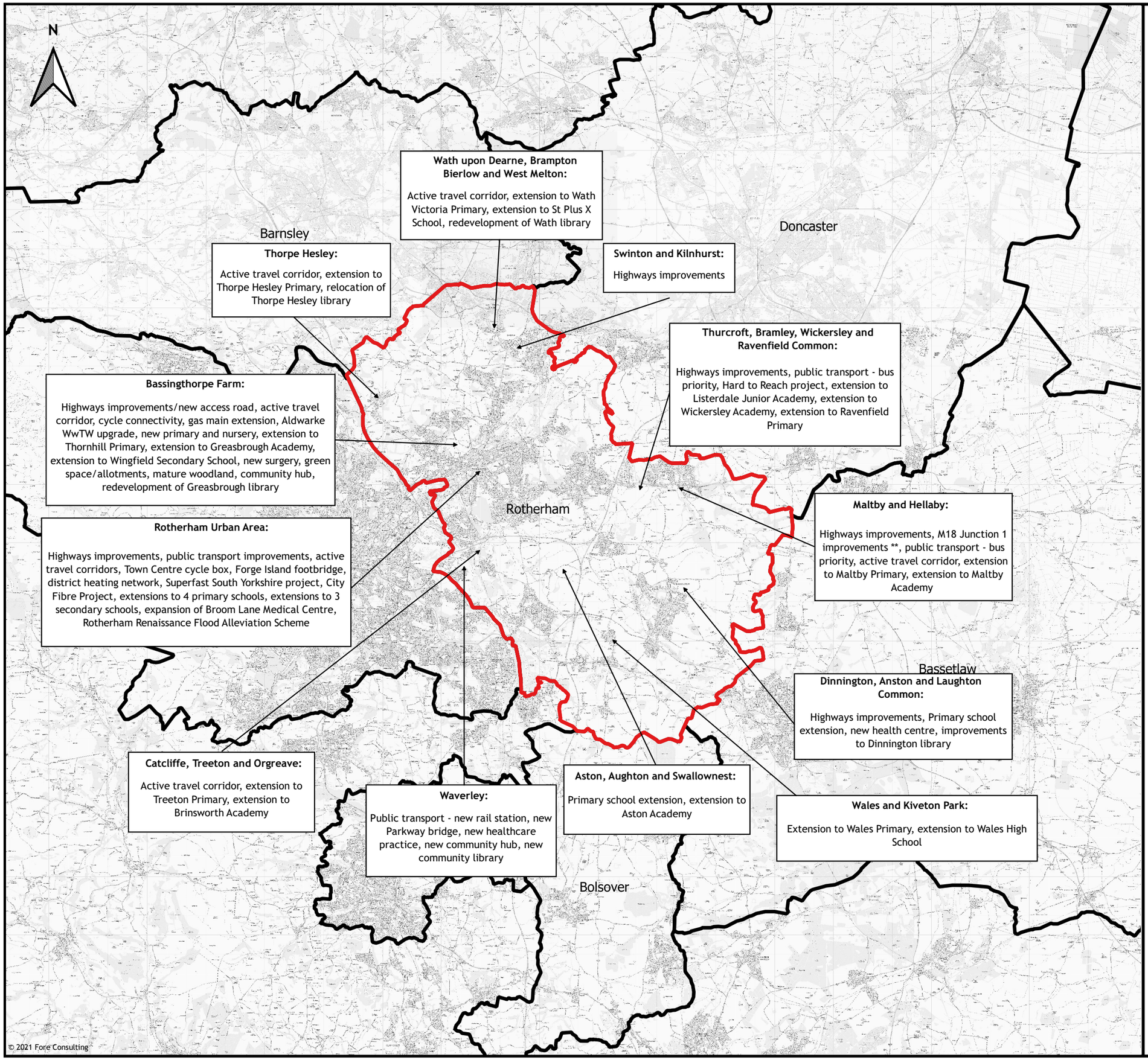
Type	Sub-Category	Infrastructure Project	Area Specific (Y/N)	Area(s) Affected	Timeframe	Estimated Cost	Lead Agency
Community	Sport and Leisure	Improvements to Playing Pitches	N		Whole Plan period	tbc	RMBC
		Play Facilities	N		Whole Plan period	tbc	RMBC
		Open Parks and Green Spaces	N		Whole Plan period	£1,250,000	RMBC
		Voluntary Sector Projects	N		Whole Plan period	tbc	RMBC
	Libraries	Relocation of Central Library	N			tbc	RMBC
		Redevelopment of Greasbrough Library	Y	Bassingthorpe Farm		£496,800	RMBC
		Extension/Improvements to Dinnington Library	Y	Dinnington, Anston and Laughton Common		tbc	RMBC
		Redevelopment of Wath Library	Y	Wath-upon-Dearne, Brampton Bierlow and West Melton		tbc	RMBC
		Relocation of Thorpe Hesley Library	Y	Thorpe Hesley		tbc	RMBC
		Waverley New Community Library	Y	Waverley		tbc	RMBC
	Community Hubs	Waverley New Community	Y	Waverley		tbc	Developer
		Bassingthorpe Farm	Y	Bassingthorpe Farm		tbc	Developer
					TOTAL	**£1,746,800**	

ROTHERHAM 2020 IDS - INFRASTRUCTURE DELIVERY SCHEDULE

Type	Sub-Category	Infrastructure Project	Area Specific (Y/N)	Area(s) Affected	Timeframe	Estimated Cost	Lead Agency
Emergency Services	Police	Manvers Police Station Refurbishment	N			tbc	South Yorkshire Police
		Callflex Site Refurbishment (increase capacity and incorporate social distancing)	N		2021	£1,000,000	Yorkshire Ambulance
		Magna Way Resilience Site - potential development works	N		2021-2022	£100,000	Yorkshire Ambulance
					TOTAL	**£1,100,000**	

Appendix C

Key Infrastructure Interventions Plan



Additional non-site specific infrastructure includes green and blue infrastructure across the Borough, public rights of way improvements, the Dearne Valley Eco-Vision project, sports and leisure improvements, public transport projects and highway improvements.

** Applies to Scenario 2 only

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Client:
Rotherham Metropolitan Borough Council

Project:
2020 Infrastructure Delivery Study

Figure Title:
Key Infrastructure Interventions

Scale:
NTS

Figure Status:
Issue

Job Number:
3941

Figure Number:
Appendix C

RICHARD WOOD ASSOCIATES

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