

Kirklees Council
Kirklees Local Plan
Infrastructure Delivery Plan

243686-00

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

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

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1 Introduction

1.1 Overview

Kirklees Council has commissioned Ove Arup and Partners Limited ('Arup') to undertake an Infrastructure Delivery Plan for the Kirklees district, to support the delivery of the council's new composite Local Plan.

The National Planning Policy Framework and Planning Practice Guidance require Local Plans to positively plan for development and the infrastructure required in the area to meet spatial objectives. Local Planning Authorities must progress a proportionate evidence base for infrastructure which assesses the quality and capacity of various forms of infrastructure. The purpose of this document will offer certainty regarding the infrastructure required to deliver the planned level of housing and employment growth in the district to 2031.

Kirklees Council is the eleventh largest local authority district in England and Wales¹ with a population of 425,517². Huddersfield, the district's principal town, is equidistant between Leeds and Manchester which brings with it a number of advantages but also pressures for the wider district. The north of the district is more urban in character with a number of towns including Huddersfield, Dewsbury and Batley. The south of the district is more rural in nature with smaller settlements including Denby Dale and Holmfirth.

Kirklees Council is currently producing a new development plan, called a Local Plan, to guide future growth and development in the district up to the year 2031. A growing population within the district, combined with a strengthening of key employment sectors will all have impacts on the required infrastructure provision across the Local Plan Period.

The Infrastructure Delivery Plan is a central evidence base document which should be used to help underpin strategic decision making on future targets for local growth and change. The analysis and conclusions within this Infrastructure Delivery Plan (IDP) therefore assess the suitability of infrastructure provision and the extent to which existing infrastructure will be 'fit for purpose' against the land requirements to deliver objectively assessed housing and employment needs.

1.2 Role of this Study

Kirklees Council is currently producing a new development plan, called a Local Plan, to guide future growth and development in the district up to the year 2031.

The purpose of the IDP is to establish the links between plan-making and infrastructure provision across the district. It specifically considers the issues relating to the implementation of the Local Plan and, in particular, the means by

¹ <http://www.kirklees.gov.uk/you-kmc/information/pdf/fact2014.pdf>

² <http://observatory.kirklees.gov.uk/profiles/profile?profileId=94&geoTypeId=>

which the required levels of infrastructure will be delivered, by whom and to what timescales.

Local Authorities and other statutory organisations are faced with the challenges of balancing fiscal prudence, aspirations for growth, objectives to regenerate areas, and adapting to societal change. Infrastructure provision is at the heart of meeting these various challenges and is the ‘glue’ by which Local Authorities can meet the needs of existing businesses and communities, whilst also achieving plans for substantial and sustainable economic restructuring, physical regeneration, and affordable housing growth to meet the needs of a growing population.

1.3 Requirement for this Study

1.3.1 National Planning Policy Context

The National Planning Policy Framework (NPPF) places great importance on Local Plans being evidence based. Paragraph 162 sets out the infrastructure evidence base required for Local Plans. This states that Local Planning Authorities should work with other authorities and providers to:

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

The NPPF also promotes the deliverability of planned infrastructure and timeliness with which this can be brought forward. Paragraph 173 states that plans should be deliverable and sustainable development requires careful attention to viability and costs in plan-making and decision-taking. Specifically in relation to infrastructure delivery, the NPPF Paragraph 177 states that:

‘It is equally important to ensure that there is a reasonable prospect that planned infrastructure is deliverable in a timely fashion. To facilitate this, it is important that local planning authorities understand district-wide development costs at the time Local Plans are drawn-up. For this reasons, infrastructure and development policies should be planned at the same time, in the Local Plan. Any affordable housing or local standards requirements that may be applied to development should be assessed at the plan-making stage, where possible, and kept under review’.

The NPPF also states that Local Plans should ‘plan positively for the development and infrastructure required in the area to meet the objectives, principles and policies of the NPPF’ (paragraph 157).

1.3.2 National Planning Practice Guidance

With regard to infrastructure, paragraph 018, reference 12-018-20140306 of the 2014 Planning Practice Guidance states:

A Local Plan is an opportunity for the local planning authority to set out a positive vision for the area, but the plan should also be realistic about what can be achieved and when (including in relation to infrastructure). This means paying careful attention to providing an adequate supply of land, identifying what infrastructure is required and how it can be funded and brought on stream at the appropriate time; and ensuring that the requirements of the plan as a whole will not prejudice the viability of development.

Early discussion with infrastructure and service providers is particularly important to help understand their investment plans and critical dependencies. The local planning authority should also involve the Local Enterprise Partnership at an early stage in considering the strategic issues facing their area, including the prospects for investment in infrastructure.

The Local Plan should make clear, for at least the first five years, what infrastructure is required, who is going to fund and provide it, and how it relates to the anticipated rate and phasing of development. This may help in reviewing the plan and in development management decisions. For the later stages of the plan period, less detail may be provided as the position regarding the provision of infrastructure is likely to be less certain. If it is known that a development is unlikely to come forward until after the plan period due, for example, to uncertainty over deliverability of key infrastructure, then this should be clearly stated in the draft plan.

Where the deliverability of critical infrastructure is uncertain then the plan should address the consequences of this, including possible contingency arrangements and alternative strategies. The detail concerning planned infrastructure provision can be set out in a supporting document such as an infrastructure delivery programme that can be updated regularly. However the key infrastructure requirements on which delivery of the plan depends should be contained in the Local Plan itself.

The evidence which accompanies an emerging Local Plan should show how the policies in the plan have been tested for their impact on the viability of development, including (where relevant) the impact which the Community Infrastructure Levy is expected to have. Where local planning authorities intend to bring forward a Community Infrastructure Levy regime, there is a strong advantage in doing so in parallel with producing the Local Plan, as this allows questions about infrastructure funding and the viability of policies to be addressed in a comprehensive and coordinated way.

Therefore the full understanding of the likely infrastructure requirements to facilitate growth is a key component in ensuring a deliverable plan.

2 Understanding of Local Policy Context

2.1 Introduction

In 2014 Kirklees Council began working on a new composite Local Plan to guide development to 2031. The Local Plan will seek to allocate sufficient land for the district's employment and housing needs across the plan period and this Infrastructure Delivery Plan is an evidence base document in support of the emerging Local Plan. The current development plan for Kirklees comprises Saved Policies from the 1999 Unitary Development Plan. Prior to 2013 Kirklees Council had been pursuing a Local Development Framework approach, centring on a Core Strategy. However this approach has since been abandoned in favour of a composite Local Plan.

2.2 Planning Policy Context

2.2.1 Emerging Planning Policy

Kirklees Council is currently preparing a new composite Local Plan that will include both strategic policies and site specific allocations. The plan will contain a number of larger employment, housing and mixed use strategic sites, as set out in the growth assumptions contained Appendix B. It will seek to ensure that the district's residents have access to a range of local facilities, adequate infrastructure and benefit from well-connected sustainable travel links to other parts of the City Region and beyond. Policies will also recognise the value of the natural built and historic environment, as well as seeking to improve quality of life through high quality inclusive design providing safe environments, and promoting opportunities for play and sport.

2.2.2 Leeds City Region LEP and West Yorkshire Combined Authority

The 2012 'City Deals' and the subsequent 'Growth Deals' each introduced new freedoms and flexibilities for Local Enterprise Partnerships (LEPs). The Growth Deals in particular introduced the concept of Strategic Economic Plans (SEPs), multi-year plans setting out the economic growth ambitions for each LEP and how these are to be achieved.

Kirklees falls within the Leeds City Region Local Enterprise Partnership ('LCR LEP') and also falls under the remit of the West Yorkshire Combined Authority ('WYCA'), the accountable body responsible for administering the closely related £1bn+ West Yorkshire Plus Transport Fund ('WY+TF'). This fund was created in 2014 as an initial phase for the coalition government's package of devolution to the regions and focuses on funding transport schemes that will facilitate and unlock growth.

The LCR SEP sets out the LEP's ambition to:

- Deliver an additional £5.2bn in economic output;
- Help create an extra 62,000 jobs by 2021;
- Provide £675m in benefits savings to the Exchequer;
- Create an environment where for every £1 invested by the taxpayer, the City Region's – and the nation's – economic output will grow by nearly £10; and
- Ensure that the City Region will be a net contributor to the public purse.

The plan was subsequently agreed with central government in July 2014 in a deal which approved:

- £573m from the government's Local Growth Fund to deliver the ambitious economic agenda between 2015 – 2021 – with £73m of new funding confirmed for 2015/16.
- £420m between 2015 – 2035 to deliver the WY+TF.

The closely related WY+TF is targeted specifically at increasing employment and economic growth across the LEP area. This 10 year programme of investment in transport has been created to help free new and existing businesses from the current restrictions they are experiencing and enable them to create and sustain a substantial number of new jobs. There are a number of Kirklees transport schemes that are included in the West Yorkshire Plus Transport Fund as set out in Chapter 4 and the Infrastructure Delivery Programme in Section 16.

2.3 Cross Boundary Issues

2.3.1 Requirements

The Kirklees Council administrative boundary encompasses a large geographical area and borders eight neighbouring authorities (including Peak District National Park Authority). Additionally the authority is part of the Leeds City Region and as such there a number of notable cross boundary issues shared with other City Region authorities.

The National Planning Policy Framework requires Local Planning Authorities to plan strategically across local boundaries through a 'Duty to Cooperate'³. More specifically, this requires Local Planning Authorities to work collaboratively with other bodies and demonstrate through evidence that strategic priorities are properly coordinated and clearly reflected in individual Local Plans. Other bodies could comprise, but are not limited to, Local Enterprise Partnerships and Local Nature Partnerships, private sector bodies, utility and infrastructure providers. The provision of infrastructure for transport, telecommunications, waste management, water supply, wastewater, flood risk and coastal change, the provision of minerals and energy is identified as a strategic priority⁴.

³ NPPF Paragraphs 178 – 181.

⁴ NPPF Paragraph 156.

The Planning Practice Guidance largely reiterates the content of national policy. It further details the requirements of the Duty, by requiring Local Planning Authorities and public bodies to engage constructively, actively and on an ongoing basis to maximise the effectiveness of Local Plan preparation in the context of strategic cross boundary matters.

Again, it further highlights the importance of planning for infrastructure⁵. Infrastructure is a key requirement of the ‘effectiveness’ element of the Local Plan test of soundness, which requires plans to be deliverable and based on effective joint working on cross-boundary strategic priorities. The involvement of infrastructure providers in Local Plan preparation is critical to ensuring that Local Plans are deliverable.

2.3.2 Neighbouring Authority Local Plan Progress

Table 2.1 summarises the Local Plan progress made by neighbouring authorities. It can be observed that a number of neighbouring authorities’ development plan documents are emerging on a similar timeline to Kirklees’s Local Plan, and as such a number of cross-boundary issues have been exposed through the duty to cooperate.

Table 2.1: Neighbouring Authorities Local Plan Progress

Authority	Local Plan Progress
Leeds	Adopted Core Strategy Adopted Natural Resources and Waste DPD Emerging Site Allocations DPD Emerging Aire Valley AAP
Bradford	Core Strategy examined spring/summer 2015
Calderdale	Emerging composite Local Plan
Oldham	Adopted joint Core Strategy Emerging Site Allocations DPD Emerging Waste Management DPD Emerging City Centre and Shipley & Canal Road AAPs
High Peak	Composite Local Plan submitted to PINS August 2014, examination ongoing
Barnsley	Adopted Core Strategy (2011) Adopted Education Sites DPD Adopted Joint Waste DPD Emerging Local Plan
Wakefield	Adopted Core Strategy (2009) Adopted Site Specific Policies Local Plan (2012) Adopted Development Policies DPD (2013) Adopted Central Wakefield AAP (2009)

⁵ Planning Practice Guidance, ID:9

	Adopted Waste DPD (2009) Emerging Retail and Town Centre Local Plan Emerging Leisure, Recreation and Open Space Local Plan
Peak District National Park Authority	Adopted Core Strategy (2011) Emerging Development Management Policies DPD

2.3.3 Notable Cross Boundary Issues

The Localism Act (2011) and National Planning Policy Framework (2012) introduced a duty to cooperate across Local Planning Authority boundaries. Paragraph 181 of the NPPF states that ‘Local planning authorities will be expected to demonstrate evidence of having effectively cooperated to plan for issues with cross-boundary impacts when their Local Plans are submitted for examination’.

This section therefore sets out the mechanisms that will be put in place to tackle potential cross boundary infrastructure issues.

The Council has been undertaking Duty to Cooperate discussions and meetings throughout the Local Plan process with relevant bodies. These include cross border transport, education and health infrastructure requirements. These discussions will be ongoing and relevant schemes identified in the Infrastructure Delivery Programme.

3 Methodology

3.1 Scope of the Infrastructure Study

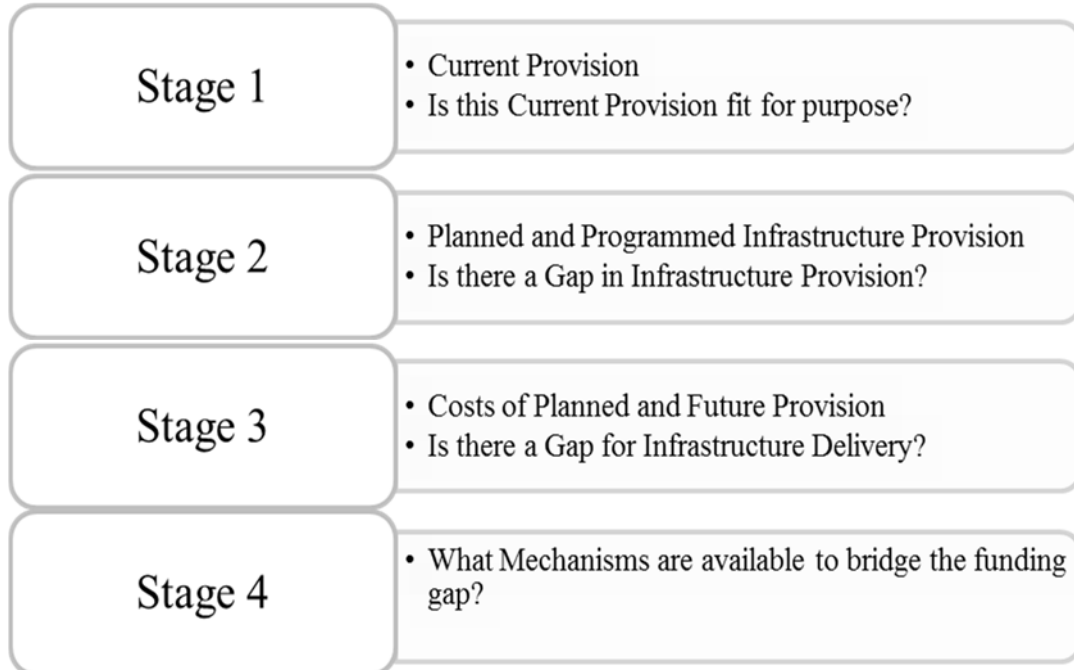
It was agreed at the inception meeting that the focus of this study would be the following infrastructure typologies:

Infrastructure Sector	Specific Infrastructure
Transport	Highways, Bus, Rail, Walking and Cycling
Utility Networks	Electricity, Gas, Water Supply, Waste Water and Telecommunications
Waste Management	Household Waste Recycling Centres, Materials Recovery Facilities, Energy from Waste Facilities
Telecommunications	Broadband, ICT
Flood Risk and Drainage	Flooding from fluvial and surface water sources. Proposed flood alleviation schemes
Education	Primary Schools and Secondary Schools
Health	Primary Care and Hospitals
Community and Cultural	Libraries, Museums and Art Galleries, Community Centres
Emergency Services	Police, Fire and Ambulance coverage
Open Space	Open Spaces, Play Areas, Allotments, Sports Pitches, Built Facilities
Sports, Leisure and Recreation	Playing Pitches and Built Facilities

This study has utilised a combination of quantitative and qualitative sources and has used the 2012 Study as a starting point. A number of focussed conversations with relevant Kirklees Council Officers and external contacts were undertaken throughout June and July 2015 to explore specific issues arising from a review of Kirklees Council's various evidence base documents. A list of all the stakeholders that have been provided in Appendix A.

3.2 Broad Stages of Assessment

This study is based on a four stage process to understand current and future infrastructure provision, taking into consideration the planned areas of growth and regeneration. This approach has made it possible to identify areas in need of further investment and potential funding mechanisms.



To give context to the assessment of current and planned infrastructure, the proposed development quantum's must be assumed and agreed. The following section therefore sets out this preparatory step prior to undertaking Stages 1 – 4 above.

3.2.1 Stage 1: Determining Current Infrastructure and if it is Fit for Purpose

At this stage the overall assumptions were set which would guide the Infrastructure Delivery Plan and baseline work. This included confirming:

- The infrastructure types which would be covered.
- The scale of housing and economic growth as defined in the development plan and the locational focus of this growth.
- The timescale that the study would cover.
- The approach to reporting the final information.

Stage 1 of this Study focussed on understanding the current infrastructure provision across the district and whether it is adequate to meet the needs of the current population.

This was undertaken through a quantitative assessment of current infrastructure and its spatial distribution, and was principally achieved through an extensive review of secondary data sources. This analysis was supplemented by discussions

with key stakeholders and local service providers to understand if existing facilities were ‘fit for purpose’.

3.2.2 Stage 2: Identify planned infrastructure provision

Stage 2 of this study involved identifying planned infrastructure provision. Utilising the baseline which set out the current level and condition of infrastructure, it was possible to carry out a broad assessment of planned infrastructure improvements up to 2031. This was based on an analysis of secondary sources and discussions with stakeholders and officers. Discussions with stakeholders took place in June and July 2015.

3.2.3 Stage 3: Confirm implications and any gaps in infrastructure provision to meet growth aspirations

Stage 3 of this study involved confirming if current, planned and committed infrastructure would be sufficient to meet the district’s future needs and demands in line with the proposed growth objectives of the Local Plan. This assessment therefore highlights where there may be gaps in future infrastructure provision. This stage also confirms the cost of bridging the gap in infrastructure provision required to deliver the Council’s planned housing and employment growth.

3.2.4 Stage 4: Identifying Funding Sources to bridge infrastructure gap

Stage 4 of this study seeks to identify potential funding sources to bridge the identified infrastructure gaps. This stage required engagement with public sector organisations, evaluating traditional funding mechanisms and establishing potential private sector involvement to determine potential funding options to deliver the infrastructure needed. These options seek to understand committed funding sources, funding sources that have already been allocated, and whether there is an identified gap between infrastructure need and committed/allocated funds.

3.3 Development Quantity Assumption

The study considers the infrastructure needed to support the level of growth proposed in the Draft Local Plan. The levels of growth used to assess infrastructure capacity issues and required new infrastructure are set out in Appendix B.

This growth includes accepted development options in the draft plan, including strategic development sites which are identified specifically in Chapter 15.

Figure 3.1 sets out the sub areas used to inform this study:

- Huddersfield.
- Dewsbury and Mirfield.
- Batley and Spennings.
- Kirklees Rural.

Figure 3.1: Diagram of Local Plan Sub Area



4 Transport

4.1 Definition and Data Sources

This section covers the transport infrastructure provision across the district including highway, rail, bus, cycling and pedestrian requirements. This will be followed by commentary on what schemes are already planned to be implemented, where funding is coming from and finally what gaps there may be in transport provision. The majority of this section was drafted by Kirklees Council Officers.

The following sources of information have been used to populate this chapter:

- Meeting with Kirklees Council Planners and Transport Team in June 2015.
- A review of the West Yorkshire Local Transport Plan, My Journey 2011 to 2026.
- A review of the committed schemes in the WYCA Single Transport Plan, including the West Yorkshire Plus Transport Fund.

The provision of transport infrastructure locally will be delivered through the following sources of funding:

- Local Authorities or groups of Local Authorities in England produce and regularly update Local Transport Plans (LTPs). LTPs identify priorities for maintaining and improving local transport systems, based on the needs and wants of residents and organisations in the region, and put forward plans for how they will be achieved. These improvements are then given funding from Central Government to be implemented. Kirklees is part of the West Yorkshire Single Transport Plan partnership.
- In addition the West Yorkshire Combined Authority, together with the five West Yorkshire local authorities and York have secured funding to establish a £1 billion West Yorkshire plus Transport Fund. The fund will underpin growth by improving the City Region's roads and railways and connecting people to jobs and goods to markets seamlessly over the next 10-15 years.
- Developer Contributions or Community Infrastructure Levy.
- Other transport bidding opportunities.

4.2 Existing Infrastructure and Fitness for Purpose

4.2.1 Introduction

The number of Kirklees residents who commute outside of the district to work exceeds the number of people commuting in. The most recent census, undertaken in 2011 shows that out-commuters (approximately 60,100) exceeded in-commuters by about 25,500. As might be expected, the flows to and from other

parts of the Leeds City Region are larger than those to and from Manchester and Sheffield city regions.

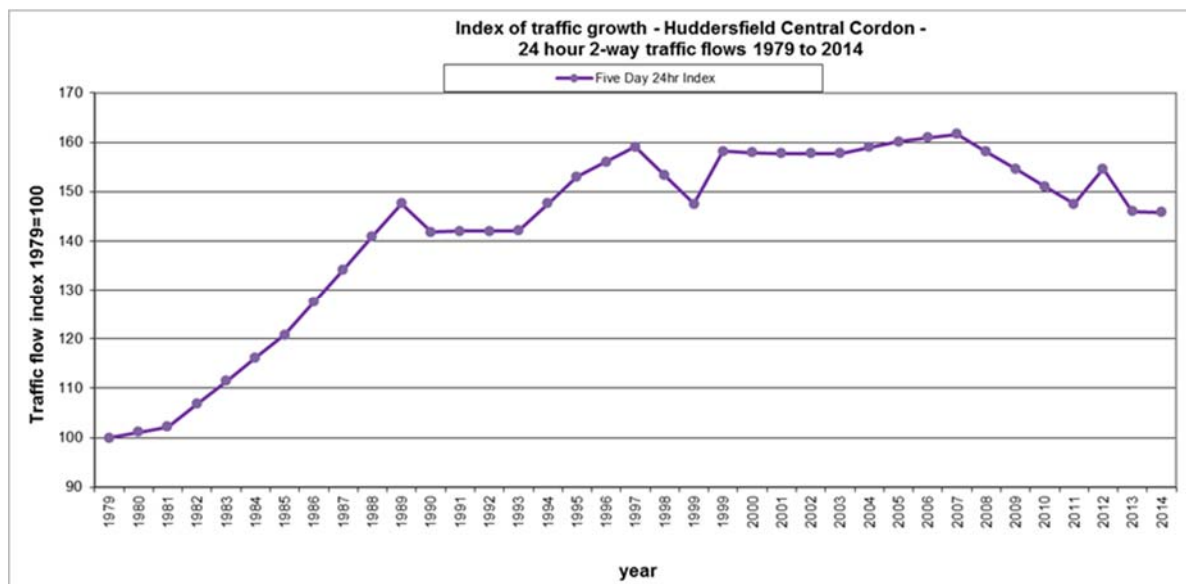
In north Kirklees, the outward flow is partly due to its location and close proximity to the 4 main cities and towns outside Kirklees in the Leeds City Region: Leeds, Wakefield, Halifax and Bradford.

All of these settlements, particularly Leeds provide employment for north Kirklees residents. In 2011 about 12,900 north Kirklees residents worked in Leeds and the total outward flow of north Kirklees residents to jobs elsewhere was 11,200 greater than the corresponding inward flows.

In south Kirklees journey to work patterns to and from destinations outside Kirklees tend to be more problematic than for north Kirklees. This is because trips to and from south Kirklees tend to be longer, many involve the use of the congested M62 and a greater proportion is by private car. There are also significant problems of overcrowding on the Cross-Pennine rail service (see section 4.2.3 Rail Provision).

Traffic levels across the Huddersfield Cordon are lower than they were at the beginning of the new millennium and average a.m. peak speeds on 19 locally managed 'A' Roads across the district as monitored by the Department for Transport have only decreased from 21mph to 20.1mph in the 8 years since the department has been monitoring them.

Figure 4.1: Index of Traffic Growth in Huddersfield Cordon



Source: Kirklees Council

4.2.2 Highways

Strategic Network

The government is directly responsible for the busiest of English roads: the Strategic Road Network. For roads passing through or near Kirklees, this means the M62, the M606, the M1 and the A628.

Kirklees has a number of connections to the strategic motorway network via junctions 23 to 28 of the M62. This provides access to key destinations such as Leeds and Manchester and other employment and service opportunities such as Bradford (via the M606). There is also access to the M1 via junction 40 east of the Dewsbury area and at junction 39 through the Denby Dale area via the A637. This provides access to Leeds, Sheffield and ultimately London.

Local Network

At a regional level, the West Yorkshire Local Transport Plan partnership has created a West Yorkshire Key Route Network which covers the main strategic roads in West Yorkshire, fulfilling the following criteria:

- the core network where vehicle flows exceed 20,000 vehicles per day and;
- roads that perform strategic functions by:
 - connecting West Yorkshire Core and Key Centres together
 - connecting these Centres to the Core District Centres within Leeds City Region and adjacent City Regions
 - performing ring road/bypass functions around the five Core District Centres, Key Centres and primary Urban Areas
 - connecting these Centres to the National Strategic Network and its emergency diversion route; and
 - connecting these Centres to Leeds-Bradford International Airport

The key strategic principles of the Key Route Network⁶ are that it should:

- Facilitate development and economic growth;
- Reduce journey times and congestion across WY regardless of district boundaries;
- Assist in the delivery of West Yorkshire plus Transport Fund schemes
- Enable closer working with Highways England and other combined authorities in the North of England

This network will play a key role in ensuring that Kirklees' development can be accommodated by ensuring and facilitating optimal traffic flow and therefore economic performance. It is envisaged that these roads will be the focus for strategic transport investment going forward.

A copy of the network at a West Yorkshire Key Route Network can be found in Appendix C.

The Kirklees district records one Air Quality Management Area ('AQMA') located along the A62 Leeds Road, in the vicinity of the junctions with the A6107 Bradley Road, and with the A644.

4.2.3 Rail Provision

The main rail route in Kirklees is the East/West Trans-pennine Route which links Huddersfield and Dewsbury to Leeds, York, Manchester and Manchester Airport.

⁶ A copy of the Key Route Network can be found in Appendix C

This is an important connection to key employment destinations in the City Region and beyond.

Local rail connections to Wakefield provide a further connection to London bound trains whilst the Penistone Line, which connects a number of rural stations in the south of Kirklees, is an important local connection to the Sheffield City Region and Midland Main Line railway.

The Trans-Pennine line is one of the busiest rail services on the West Yorkshire Metro Train network in Northern England, with an estimated 976,000⁷ annual journeys between Huddersfield and Leeds and a further 681,000 journeys between Leeds and Manchester (passing through Huddersfield).

There are known issues with capacity between Huddersfield and Leeds and Huddersfield and Manchester, with many peak services experiencing overcrowding. The most recent rail passenger numbers statistics produced by the Department for Transport show that Trans-pennine services in the a.m. and p.m. peak into Leeds and Manchester show 12% and 19% respectively standing as a percentage of standard class critical load⁸. The national average is 8%.

The rail network has seen significant growth in the last decade. Recent local forecasts⁹ undertaken as part of the Yorkshire Rail Network Study 2012 suggest demand across West Yorkshire could be between 21% and 37%.

4.2.4 Bus Provision

In 1986, Implementation of the Transport Act (1985) led to the deregulation of bus services in England, Scotland and Wales, with the exception of London. This introduced competition on local bus services, and meant that local authorities could no longer regulate the routes and fares of the bus operators. Instead they (or Passenger Transport Executives in the case of major conurbations such as West Yorkshire) moved to a role of maintaining common facilities and financing less profitable but socially necessary services.

The situation in 2015 remains unchanged, with the West Yorkshire Combined Authority (WYCA) taking the lead on behalf of Kirklees Council and the wider Leeds City Region in working with private bus operators to bring about improved services and better value for money on behalf of local people.

7

<http://www.networkrail.co.uk/browse%20documents/rus%20documents/route%20utilisation%20strategies/yorkshire%20and%20humber/yorkshire%20and%20humber%20rus.pdf>

⁸ Department For Transport Rail Statistics, Table RAI0214 Peak Crowding in a typical autumn weekday by city and Train operator: 2014 (<https://www.gov.uk/government/collections/rail-statistics>)

Note Standard Class Critical Load is defined as :

The number of standard class passengers on a service at the critical load point. It is the highest number of standard class passengers on a service on arrival at (AM peak) or on departure from (PM peak) a city.

⁹<http://www.wymetro.com/uploadedFiles/WYMetro/Content/news/projects/projectdetails/Yorkshire%20Rail%20Network%20Study%20-%20Conditional%20Output%20Statement%20v11.pdf>

For many years bus passenger numbers have been falling across West Yorkshire. In the five years between 2009/10 and 2014/15 patronage has dropped from 169.2 million per annum to 156.8 million per annum. This is a trend mirrored in Kirklees. Although since deregulation the bus network in Kirklees has also progressively contracted, the district does benefit from a good level of bus provision. Current services are mainly concentrated along the corridors between the district's main towns and the urban areas/villages between them.

The network of bus services in rural south Kirklees is generally good, but here services operate on a lower frequency and greater public subsidy is required to maintain evening and Sunday services.

4.2.5 Cycling and Walking

Nationally there exists a real commitment to cycling and walking. In 2014 the Government published a 10 year cycling Delivery Plan. This followed on from the publication in April 2013 of a report setting out how to 'Get Britain Cycling' which included 18 recommendations to government. Further to this, in April 2014 the All Party Commission on Physical Activity published 'Tackling Physical Inactivity: A Coordinated Approach' which also set out a number of recommendations to get the country more active.

This followed on from the launch in February 2014 of 'Moving More, Living More', a cross government commitment to increase physical activity for all age groups and carry on the legacy of the London 2012 Olympic and Paralympic Games.

Cycling and walking are low cost, environmentally friendly and healthy. Encouraging more people to make more trips by bicycle and to walk more is a priority in the West Yorkshire Local Transport Plan (LTP3, 2011-2026).

The Local Transport Plan aims over its 15-year life, to develop the role of cycling both as a mainstream transport mode, but also for the health, sport and leisure benefits it brings. Ideally cycling should be accessible to all and offer a practical, natural and popular choice for shorter journeys as an alternative to the car, although the topography of the Kirklees district (particularly South Kirklees) makes this a challenge.

Cycling makes up approximately 1.5% of all journeys in West Yorkshire, a rate which it is aimed to increase. The 2011 Census data and our own town and city centre cordon counts show recent modest increases in cycling. Where dedicated cycle facilities have been provided the mode share for cycling has increased significantly. In addition there is a growing demand for cycling for leisure and health purposes in West Yorkshire.

Current Government Policy is to promote cycling and walking and £9 million pounds has been invested in West Yorkshire in the last 3 years.

The West Yorkshire Local Transport Plan notes that between 3% and 6% of morning peak trips to urban centres are made by walking. In addition maintenance is required on 15% of the busiest walking routes. Consultation carried out during Plan preparation found that lack of infrastructure, safety and lack of education are

discouraging cycling and walking. The consultation also found that cycling and walking will be unlikely to increase without interventions.

4.3 Planned Schemes and Gap Analysis

4.3.1 Strategic Highway Network

The Government owned strategic highways company that manages the national Motorway Network, Highways England, has produced a Roads Investment Strategy¹⁰ 2020. This strategy is informed by a large scale programme of social research undertaken by the Department for Transport to understand how individuals interact with, and perceive, the Motorway Network. In addition a long term planning and forecasting exercise has been undertaken that, coupled with technical work around existing areas of congestion developed as part of the M62 Route Based Strategy¹¹, forms a comprehensive gap analysis.

The Roads Investment Strategy includes a long-term funding commitment from Government to support delivery of a programme of works, which for Kirklees includes:

M1 Junctions 39-42: upgrading the M1 to Smart Motorway, including the use of hard-shoulder running, between junction 39 (Denby Dale) and junction 42 (M62 interchange) near Wakefield.

M62/M606 Chain Bar: provision of a direct link from the M62 westbound to the M606 northbound and removing significant congestion from the main part of the existing junction.

M62 Junctions 20-25: upgrading the M62 to Smart Motorway between junction 20 (Rochdale) and junction 25 (Brighouse) across the Pennines. Together with other Smart Motorways already under construction in Greater Manchester and existing Smart Motorways in Yorkshire, this will provide a full four lane Smart Motorway link between Leeds and Manchester.

A628 climbing lanes: consideration of the provision of two overtaking lanes on the A628 near Woodhead Bridge and near Salter's Brook Bridge.

It should be noted that later in this chapter, reference is made to the provision of a new junction 24a on the M62 between junctions 24 and 25. Whilst this is not in Highways England's first 5 year Roads Investment Strategy, nor is it mentioned in the schemes to be developed for the next 5 year Investment Strategy, Kirklees and the West Yorkshire Combined Authority are working closely with Highways England to quantify the benefits of the scheme for both the strategic and local

¹⁰

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

¹¹

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/364197/FINALM62RBS.pdf

road networks and how it might support development aspirations in both Kirklees and Calderdale.

4.3.2 Local Highway Network

As part of the preparatory work undertaken for the local plan, a combined simulation and assignment traffic model with a public transport component was produced. The purpose of this model was:

- Model the existing highway network within Kirklees and how traffic uses it at present.
- Understand the (cumulative) traffic impact of the site specific allocations of the Kirklees Local Plan on the local highway network
- Develop realistic mitigation measures to support these allocations and test them to understand not only their benefit but what impact they will have on traffic reallocation across the local highway network.

The traffic model has been used to calculate an existing base situation in terms of congested junctions across Kirklees in the am peak and the top 20 are represented on Figure 4.2 and 4.3.

Figure 4.2: North Kirklees Congestion at AM Peak (top 20 junctions)

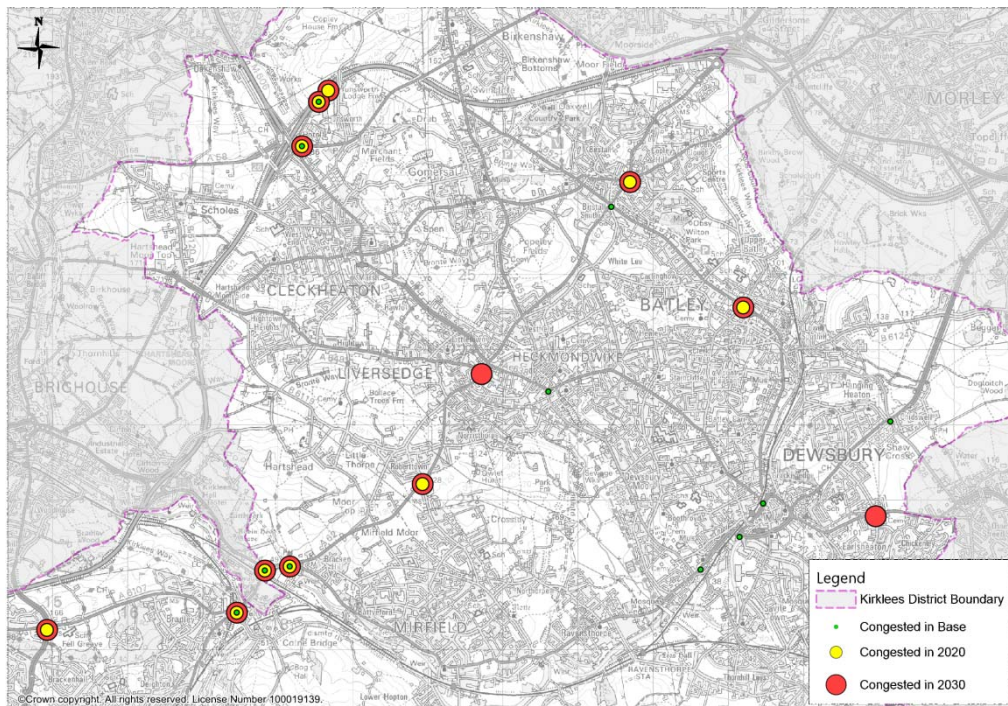
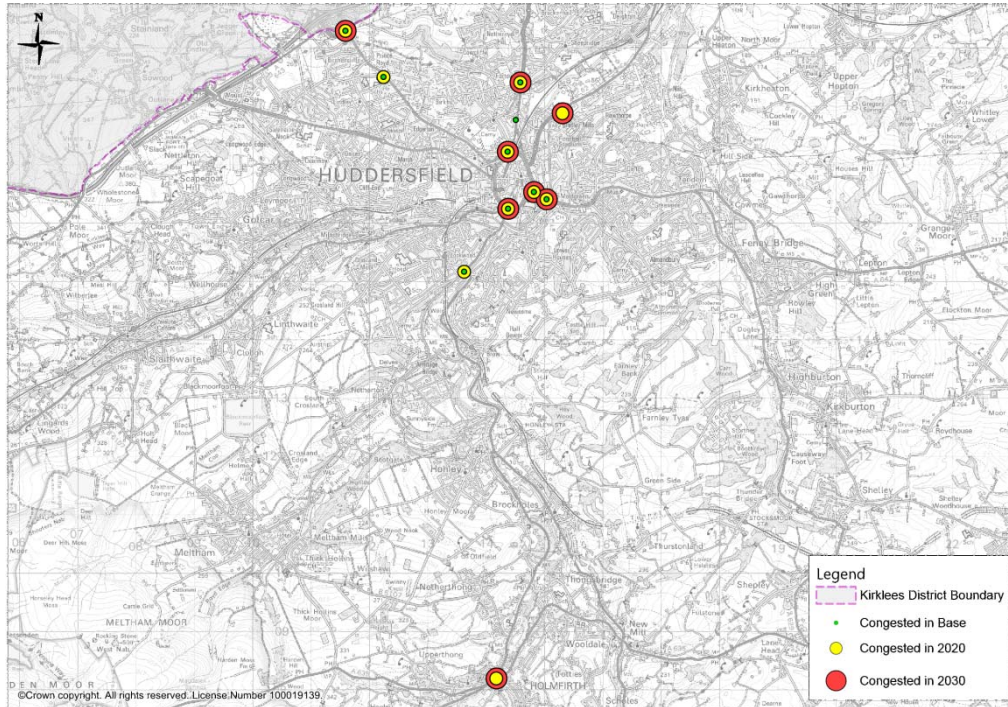


Figure 4.3: South Kirklees Congestion at AM Peak (top 20 junctions)



Congested junctions have been defined as junctions where one arm experiences a flow to capacity ratio exceeding 85% and that arm carries more than 350 passenger car units.

In addition Figure 4.2 and Figure 4.3 shows junctions where the impact of potential new development across the plan period is greatest on the top 20 certain junctions in terms of delay. Spatial analysis of these junctions shows that they fall into 9 broad areas and a mitigation strategy has been designed to reflect these impacts. The references reflect schemes identified in the draft Local Plan.

The following table shows how, through identified programmes and funding sources, Kirklees intends to address these highway issues.

Table 4.1: Identified programme and funding sources.

Corridor /Area	Location	Programme and funding Opportunity
TS 1	A62 Leeds Road/Bradley Mills Road A62 Leeds Road/ A6107 Bradley Road A62 Leeds Road/ A644 Wakefield Road (Cooper Bridge) A62 Leeds Road/ A644 Huddersfield Road (Three Nuns) A62 Leeds Road/ Sunny Bank Road A62 Huddersfield Road/ A649 Halifax Road Leeds Road Cycle Super Highway	West Yorkshire Transport Fund Projects: A62/A644 Cooper Bridge Junction A62 and A644 corridors including Ravensthorpe Relief.
TS 2	A641 Bradford Road/ A62 Castlegate/ St Johns Road	West Yorkshire Transport Fund Project :

	A641 Bradford Road/Willow Lane A641 Bradford Road/ Fartown Green Road (Fartown Bar) A641 Bradford Road/A6107 Bradley Road Roundabout	M62 Junction 24a scheme
TS 3	A616 Woodhead Road/ B6108 Meltham Road (Lockwood Bar) A616 Chapel Hill/ A62 Queensgate A62 Queensgate/A629 Wakefield Road (Shorehead) A629 Wakefield Road/B6432 St Andrews Road	Lockwood Bar and Chapel Hill- Part funded Through the West Yorkshire Transport Fund (Highways Efficiency and Bus Priority Programme) Intention to expand this programme to cover the remaining two junctions.
TS 4	A629 Halifax Road/ Birkby Road A629 Ainley Top Roundabout	West Yorkshire Transport Fund: A629 Corridor
TS 5	A644 Huddersfield Road /B6117 Thornhill Road A644 Huddersfield Road/A638 Dewsbury Ring Road (Webster Hill) A638 Dewsbury Ring Road/ A638 Halifax Road A638 Wakefield Road/ Syke Lane A653 Leeds Road/ B6128 Challenge Way (Shaw Cross)	West Yorkshire Transport Fund Project: A653 Dewsbury to Leeds Corridor
TS6	A62 Huddersfield Road /A652 Bradford Road (Birstall Smithies) A62 Gelderd Road/ A643 Leeds Road (Coach and Six) A652 Bradford Road/ B6123 Stocks Lane signals	No funding opportunity identified to date
New Schemes, Previously unidentified	A638 High Street/ B6117 Market Street signals A6024 Huddersfield Road/ A635 Victoria Street signals	The A638/B6117 junction is noted as congested in the base but has not been modelled as being impacted by development traffic to such a degree that it places it in the top 20 affected junctions. No funding opportunity identified to date
Highways England responsibility	M62 Junction 26 Chain Bar	Highways England Roads Investment Strategy (See section 4.3.1 above)

4.3.3 Rail Improvements

The main committed rail improvement scheduled to be delivered in the plan period is the electrification of the Trans-pennine line, between Manchester, Leeds and York.

The electrification of the Calder Valley railway line following the completion of the Trans-pennine electrification will provide some benefits to the Kirklees

district by allowing Northern Rail (or any future franchise) to operate electric trains from Sowerby Bridge (Calderdale) to Mirfield and the wider Northern Rail network. This scheme currently does not have committed funding.

Other improvements set to benefit the district's rail offer as part of the West Yorkshire Transport Fund include the provision of a Gateway scheme at the rear of Huddersfield Station which includes improvements to the parking supply at St George's Warehouse and the creation of a direct link to the station. The Fund is also promoting schemes to improve parking at railway stations across the district. These schemes will encourage sustainable employment growth in the main urban centres and support modal shift from car to rail for travel into city centres.

4.3.4 Bus Improvements

In 2016 a Single Transport Plan (STP) for West Yorkshire will be launched to set out a twenty year vision for developing an integrated transport network that supports the Leeds City Region Enterprise Partnership's Strategic Economic Plan (SEP) for sustained and healthy economic growth - especially for jobs and housing.

The role of Kirklees Council, in partnership with the Combined Authority going forward will be to support the delivery of the STP through a focus on:

Transport assets: Getting best value from existing components of the transport network, such as bus stations, transport hubs, and traffic signals.

Travel choices: Enabling customers to make sustainable travel choices.

Connectivity: Ensuring people can make integrated and safe journeys, using transport networks on which they can rely.

Enhancements: Influencing the overall network to make it more fit for travel patterns that we expect to emerge as a result of future development.

Currently there are a number of investments planned that will benefit buses. At the heart of the investment strategy is a new framework for the procurement and delivery of bus services through either Bus Quality Contracts or a new Bus Partnership (if it can deliver the desired outcomes). This will be supported by a new model for planning transport services at a community level to address local accessibility issues. Both, it is postulated will reduce the decline in passenger numbers. This new framework will be supported by substantial physical investment from the West Yorkshire Transport Fund in the form of the Highways Efficiency and Bus Priority Programme which seeks through approximately £125m worth of investment in measures to improve the reliability of journeys, and to make the bus a realistic alternative to journeys by the private car.

4.3.5 Cycling and Walking Improvements

As part of the Local Plan preparatory work, a 'Core Walking and Cycling Network' has been identified. It is intended that this will provide a strategic and integrated system of cycle routes, public footpaths and bridleways that provide opportunity for alternative sustainable means of travel throughout the district and

provide efficient links to urban centres and sites allocated for development in the Local Plan. The network includes existing routes, such as the greenways, proposed routes and indicative routes.

Existing routes are defined as a combination of those which have been constructed, roads, public rights of way and bridleways. Proposed new cycle routes (on and off road) have been identified by the council through regional funding arrangements and liaison with cycling delivery groups. Indicative areas of the route are sections where the Council have identified strategic gaps in the existing network and will work to define these indicative routes throughout the plan period.

A plan showing the proposed and existing cycling network can be found in Infrastructure Technical Paper supporting the draft Local Plan. A number of key routes for development and their funding sources are listed below:

Table 4.2: Key Route for Development and Funding Sources

Project Name	Location	Programme and funding Opportunity
Huddersfield Town Centre and Connectivity	Huddersfield-wide	City Connect 2
Colne Valley Canal Towpath	Huddersfield to Standedge Tunnel	City Connect 2
Calder Valley Greenway, Section A: Cooper Bridge to KMC / Calderdale boundary	Leeds Road, Bradley (A62) via road/track to canal towpath to Anchor Place Lock	TBC
Dalton to Deighton Greenway	School Lane, Dalton to Leeds Road (A62) Deighton	Local Transport Plan
Dewsbury Town Centre and Connectivity	Dewsbury-Wide	West Yorkshire plus transport Fund
Shepley Bridge Marina, Mirfield to Spen Valley Greenway	Northern Riverbank @ Shepley Bridge Marina via river and canal paths to New Cut Top Lock / end of Spen Valley Greenway	TBC
Spen Valley Greenway (East) extension	End of Spen Valley Greenway to Wakefield / Kirklees Boundary	TBC
Spen Valley Sports College Link	High Street, Heckmondwike to Walkley Lane / Spen Valley Greenway	TBC
Spen Ringway - south extension	TBC	TBC
Wilton Park Cycle Path	Six lane Ends (A62, Birstall) to Wilton Park & Wilton Park to Batley Field	TBC
Birstall Oakwell	Oakwell Hall Country Park to Howden Clough Beck - Kirklees / Leeds boundary	TBC

4.4 Summary of Transport Infrastructure

4.4.1 Responsibility for Delivery

There are a number of agencies involved in delivering the transport infrastructure requirements set out in the IDP. The principal issue will be funding.

Responsibilities are as follows:

Kirklees Council/ The Combined Authority: Use of Local Transport Plan and West Yorkshire Transport Fund capital to deliver parts of plan.

Bus and Rail Operators: To assist in delivery of the public transport elements of plan.

Developer Contributions: Larger scale development opportunities such as those at Cooper Bridge and Land south of Ravensthorpe Road will be an opportunity to deliver some of the strategic interventions. These opportunities along with other schemes across the district may be delivered with the contribution of Planning Obligations or the CIL.

DfT/Sustrans and Other Agencies: DfT has a role in funding larger schemes in particular on the Strategic Road the whole of the rail networks as well as providing grants to assist with a range of projects. In addition there are a range of partners which can be harnessed, such as Sustrans, to assist in project delivery and funding.

Rail: Periodically the DfT calls for bids to fund Access for All station improvements to make stations conform to disability legislation, and for Station Commercial Project Facility bids. The Network Rail Discretionary Fund and other railway funds may be accessed for small improvements. Bids are submitted in partnership with the Combined Authority and involve the train operating companies and Network Rail.

Local Enterprise Partnerships: Potential major supporter and funding channel for schemes that support economic activity, e.g. Local Growth Fund.

4.4.2 Future Delivery Programme

The main challenge for transport within Kirklees is to provide a well maintained and improved transport system with improved connections to neighbouring towns and cities within the Leeds City Region, to support a strong and thriving economy, and to reduce its carbon impact. Transport must be available for all to access services and jobs.

The council will need to continue to invest in transport. It is important to understand that the management and maintenance of our assets, our casualty reduction work and network management, such as urban traffic control, will continue as a day to day necessity to ensure that the transport system is managed as efficiently, safely and effectively as possible.

It is recognised however that to deliver the Local Plan development strategy, investment will be required over and above this level of activity to ensure that the

additional trips produced by new development and the increase in population and the associated impacts are minimised.

Whilst the Infrastructure Delivery Plan is based on findings from a traffic model, congestion and delay will still, however, occur in the future. This is an unnecessary cost to businesses and the economy, therefore capacity improvements may be required at other key locations.

The approach to transport infrastructure provision will be to concentrate on key corridors, providing capacity enhancements and connections to locations outside the district, improved rail facilities in selected areas and an extension of the walking and cycling network.

Figure 4.1 and 16.1 collates the information and schemes together from this chapter into the Infrastructure Delivery Schedule.

Figure 4.1: Summary of Transport Infrastructure

Ref	Location	Scheme	Essential / Desirable	Lead delivery agency	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding
TS1	Huddersfield and Dewsbury / Midfield	A62 Huddersfield to junction 25 of the M62, via the A62, Cooper Bridge and the A644	Essential	Kirklees Council West Yorkshire Combined Authority (WYCA)	Funding Secured through West Yorkshire Plus Transport Fund WY+TF The scope of the works required is currently being defined.	£69.3m	Medium term (5-10 years) 2023/24	£6 Million developer funding expected
TS2	Huddersfield	New Motorway Junction 24a on the M62	Essential	Kirklees Council West Yorkshire Combined Authority (WYCA)	The scheme has funding allocated in the Yorkshire Plus Transport Fund WY+TF, but is not currently in Highways England's Road Investment Strategy. Work is currently being undertaken in partnership with Highways England to understand in detail the full economic benefits of the scheme for both the local and the strategic network. The scope of the works required on the A641 is being defined- The indicative cost is currently being reconsidered.	£50 – 60m	Medium term (5-10 years) 2021/22	No gap

TS3	Huddersfield	South Huddersfield Arterial Route Improvements	Essential	Kirklees Council West Yorkshire Combined Authority (WYCA)	Part funded through the West Yorkshire Transport Fund Highways Efficiency and Bus Priority Package	£10 - £15m	Medium term (5-10 years)	Potentially £10 m
TS4	Huddersfield	Halifax - Huddersfield A629 Corridor	Essential	Kirklees Council West Yorkshire Combined Authority (WYCA)	Funding secured through West Yorkshire Plus Transport Fund WY+TF Progressing towards Gateway 1 submission.	£11m	Short term (0-5 years) 2019/20	No gap
TS5	Dewsbury & Mirfield	A653 Leeds Road corridor and Dewsbury Area Integrated Transport Strategy	Essential	Kirklees Council West Yorkshire Combined Authority (WYCA)	Funding secured through West Yorkshire Plus Transport Fund WY+TF The works required is being defined.	£10m	Medium term (5-10 years) 2022/23	No gap
TS6	Dewsbury and Batley	The A652 Bradford Road corridor	Essential	Kirklees Council	Not defined	£20m	Medium term (5-10 years)	£20m
TS7	District Wide	Highways Efficiency and Bus Priority Programme	Essential	Kirklees Council West Yorkshire Combined Authority (WYCA)	Funding secured through West Yorkshire Plus Transport Fund WY+TF	£158 M (across West Yorkshire)	Medium term (5-10 years)	Gap in Funding
TS8	District Wide	Highway Network Efficiency Programme	Essential	Kirklees Council West Yorkshire Combined Authority (WYCA)	Funding secured through West Yorkshire Plus Transport Fund WY+TF Gateway 1 Submission Dec 2015	£7.3m (across West Yorkshire)	Short term (0-5 years) 2018	No gap
T9	Holmfirth	Isolated junction improvements	Essential	Kirklees Council	TBC	£10m	Medium term (5 – 10 years)	£10m
T10A	District Wide	Huddersfield Town Centre	Essential	Kirklees Council	Local Transport Plan Integrated Transport Block	£1.3m	Ongoing	No gap
T10B	District Wide	Huddersfield Station Gateway	Essential	Kirklees Council West Yorkshire Combined Authority (WYCA)	Funding secured through West Yorkshire Plus Transport Fund WY+TF	£5m	Short Term (0-5 years) 2015 - 2018	No gap
T10C	District Wide	Electrification of the Trans	Essential	Department for Transport	Funding secured from Department for Transport	£290m	Medium Term (5-10 years)	No gap

		Pennine Line		Network Rail				
T10D	District Wide	Calder Valley Electrification	Desirable	WYCA / CBMDC / Network Rail	Funding would need to be a mixture Department for Transport and of Train Operating Company (TOC) funding.	Unknown	Medium term (5 – 10 years)	No committed funding confirmed.
T10E	District Wide	Rail Parking (Mirfield and Ravensthorpe)	Essential	Kirklees Council West Yorkshire Combined Authority (WYCA)	Funding secured through West Yorkshire Plus Transport Fund WY+TF Gateway 1 Submission Dec 2015	£177,000	Short Term (0-5 years) 2015 - 2018	No gap
TS10F	District Wide	Railway Station Cycle Improvements	Essential	Train Operating Companies (Northern and Trans-pennine)	Cycle Rail Fund Train Operating Companies	£14.5m	Short term (0 - 5 years)	Part gap in funding, potentially filed by Train Operating Companies
T11	District Wide	Walking and Cycling Improvement Schemes	Essential	Kirklees Council West Yorkshire Combined Authority (WYCA)	CityConnect Funding. Local Transport Plan Integrated Transport allocation Developer Contributions	£6m	Short term (0 – 5 years)	£4m
TS12	District-wide	Motorway link and junction improvements	Essential	Highways England	Roads Investment Strategy	£1.4 billion across the North East and Yorkshire)	Short to medium term(5 years)	No gap

5 Utilities

5.1 Definition and Data Sources

This section covers the primary utility networks comprising electricity supply, gas supply, water supply and treatment.

The following sources of information have been used to populate this chapter:

Electricity

- Northern Powergrid, Long Term Development Statement (LTDS) November 2014.
- Northern Powergrid-Long Term Development Statement (LTDS) May 2014
- Discussion with Michael Walbank, System Planning Manager, Castleford on overall approach to Northern Powergrid's LTDS

Gas

- Northern Gas Networks, Long Term Development Statement (LTDS) 2013.
- Northern Gas Networks, Business Reports 2012.
- Northern Gas Networks, Stakeholder Report 2013.
- Contact, Diane Watson, Network Support Officer.

Water Supply and Treatment

- Discussion with Yorkshire Water

5.2 Existing Infrastructure and Fitness for Purpose

5.2.1 Electricity

The main electrical infrastructure in Kirklees is operated by Northern Powergrid, as a regional Distribution Network Operator (DNO) are required to produce a Long Term Development Statement (LTDS) giving detail of the current and proposed status of their network. This includes load forecasts for the next 5 years on their 132 kV and 66/33 kV equipment. Northern Powergrid, like all regional Distribution Network Operators (DNOs) operate on a first come, first serve basis for electricity. This means that a development site, including outside the Kirklees boundary, may absorb existing capacity in an electricity substation, requiring the next development to contribute towards an upgrade.

Discussions have been held with Michael Walbank, System Planning Manager, on the interpretation of information within the LTDS and how to use it to determine capacity issues.

The electrical supply system in Kirklees originates at the grid supply point within Lowfields Industrial Estate where Northern Powergrid's system meets with National Grid's national transmission system. The supply point feeds out to a

small number of 132 kV supply points which in turn feed primary substations around the region.

Primary (33 kV to 11 kV) substations generally feed out to secondary (11 kV to LV) substations which connect to local homes and commercial premises. However it is the primary substations that pose the biggest obstacles to development, as the triggering of works to upgrade or provide new primary substations can result in costs in the £Ms being passed on from Northern Powergrid to the developers.

The primary substations feed a network of distribution substations throughout Kirklees. These distribution substations have varying capacities depending upon the extent and demands of the premises they supply.

There is some competition in the provision of new connections and associated infrastructure which enables Independent Distribution Network Operators (IDNO) to design, install, own and operate independent systems. This approach can often significantly reduce capital costs for connections.

5.2.2 Gas

The local gas distribution network in the Kirklees area is owned by Northern Gas Networks (NGN) and supplied by National Grid. The distribution map of the Northern Gas Network is shown on Figure 5.1.

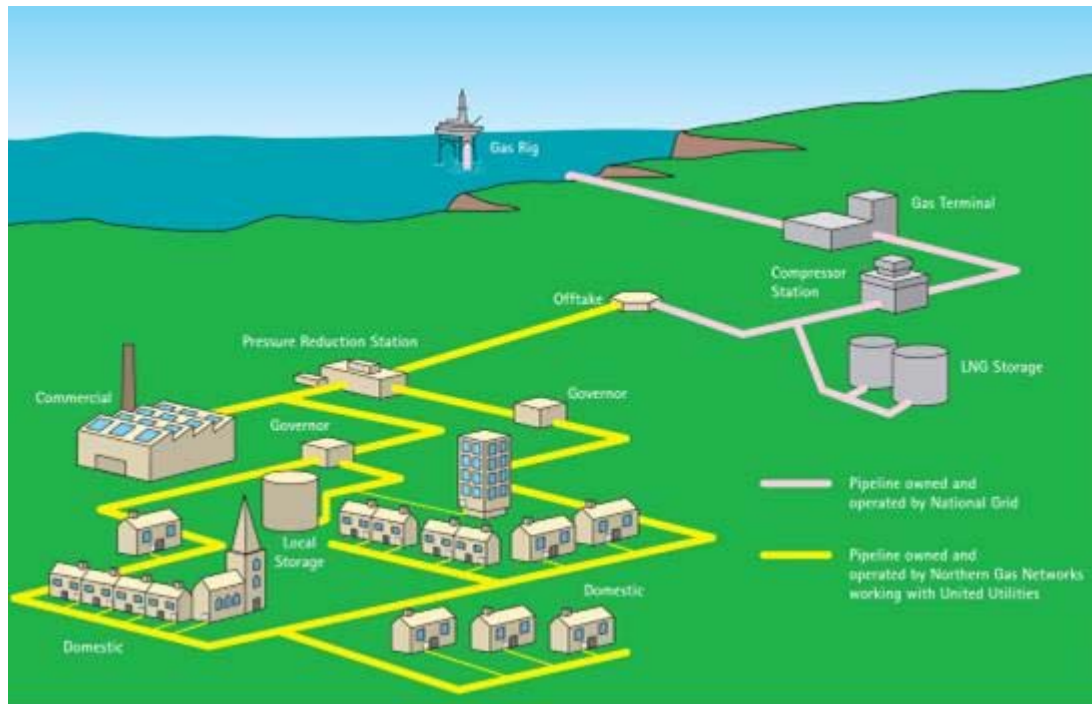
The gas industry is regulated by Ofgem.

Figure 5.1: Transmission Map of Northern Gas Networks



NGN receives gas at high pressure from National Grid's main transmission lines. The gas enters the local network at high pressure and through a series of pressure reducers, governors and gasometers and increased main sizes, the pressure is adjusted for distribution to premises. There are no National Grid transmissions assets in the Kirklees area.

Figure 5.2: Beach to Meter schematic



Source: Northern Gas Networks

As the owners of the Gas Distribution Zone network in Kirklees NGN are responsible only for providing the network through which gas flows. Other companies in the gas industry are responsible for gas production, gas transmission, metering and billing.

NGN publishes a Long Term Development Statement (LTDS) annually. This document provides a ten-year forecast of transportation system usage and likely system developments that can be used by companies contemplating connecting to the gas network, entering into transport arrangements, or wishing to identify and evaluate opportunities. It is important to note that NGN's 2014 LTDS predicts a decline in overall annual gas demand. This has been accredited to a less than favourable economic outlook, increases in UK gas prices, and a reduction in 1 in 20 peak day forecasts. These figures will be reviewed in the 2015 LTDS.

5.2.3 Water Supply

The regulated water company in the area is Yorkshire Water (YW). Their regulator is Ofwat. YW is responsible for the full range of the water business from production, treatment, distribution, metering and billing.

Kirklees is located on the Yorkshire Grid and water can be supplied from around Yorkshire.

Figure 5.3: Yorkshire Water's Supply Grid



Source: Yorkshire Water – www.yorkshirewater.com

5.2.4 Waste Water Treatment

The Kirklees district is served the following Wastewater Treatment Works (WwTW).

- Huddersfield (Calder Valley / Deaton) WwTW: serving Huddersfield and west of the district towards Marsden (Kirklees Rural).
- Mitchell Laithes, Dewsbury WwTW: serving Dewsbury, Batley and Spennings Dale
- Neiley (Holmfirth) WwTW: serving Kirklees Rural
- Meltham: serving Kirklees Rural.
- Clayton West: serving Kirklees Rural.

There are also a number of small WwTW serving smaller settlements.

5.3 Planned Schemes

5.3.1 Electricity

The following system development projects in the Kirklees area outlined by Northern Power Grid are either under construction or have received funding:

- (West Melton Section 3 GSP, Wakefield Monckton Road SP) – Monckton Road additional STOR generation connection.

5.3.2 Gas

Through discussion with Northern Gas it was confirmed that there are no scheduled gas capacity improvements.

5.4 Water

Through discussions with Yorkshire Water it was confirmed that in the five year spending period from 2015 to 2020, called the AMP 6 period there are planned capital schemes at:

- Meltham.
- Clayton West.
- Neiley (Holmfirth) WwTW.

The schemes are driven by water quality requirements, but include an increase in capacity for planned household growth. They pick up growth for the next 15 years, providing necessary capacity until 2030.

5.5 Impact of Proposed Development

5.5.1 Overall Development

The proposed developments scheduled to be constructed by 2031 will have a significant impact on the existing utility infrastructure in the region. The demand quanta has been assessed and utility demand estimates have been calculated. The demands have been assessed for two scenarios, Summer Afternoon and Winter Evening, in order to assess the peak demand generated over the different land uses. These demands have been measured against projected capacities either provided by the utility operators or assessed through discussions with the utility operators.

The total development quanta outlined by Kirklees Council is shown below. Following receipt and analysis of this information the level of proposed employment and housing has increased. This change has been set out in Appendix B. This does not change the broad conclusions of the utility chapter, however further work will be required to reflect the quantum's of development included in the Draft Local Plan, November 2015. This is particularly apparent in relation to Strategic Employment Site: Land at Cooper Bridge, where the level of square

metres of employment has increased from 21,403 sqm to 161,195 sqm. Master planning for this site is ongoing and further assessment will be made in relation to infrastructure requirements will be carried out to inform the next iteration of the Local Plan.

Number of new housing units	18,985
Office Space (m ²)	199,655
General Industry (m ²)	232,931
Warehousing (m ²)	304,928

The resulting estimated utility demands over the entire region are shown below:

Max. Electricity Demand	62.07 MW
Max. Gas Demand	130.99 MW
Daily Water Demand	6232.3 m ³ /day
Daily Foul Demand	5920.7 m ³ /day

Demand assessments for each of the four sub-areas; Huddersfield, Dewsbury and Mirfield, Batley and Spen, and Kirklees Rural are examined in more depth in chapters 5.45.2 to 5.5.5, with an emphasis on the strategic sites outlined in chapter 15.

5.5.2 Huddersfield

Quantum of Development

The development quanta for the Huddersfield sub area outlined by Kirklees Council is shown below:

Number of new housing units	7047
Office Space (m ²)	30,595
General Industry (m ²)	35,694
Warehousing (m ²)	35,694

The Huddersfield sub area includes strategic sites, Land north of Bradley Road, Bradley, Huddersfield, and Land north of Blackmoorfoot Road, Crosland Moor, and Huddersfield.

Electricity

The electrical demand generated by the proposed developments compared with the capacity of the substations in the area is shown below:

Sub-Area	Electrical Demand (MW)	Available Capacity - 2018/2019 (MVA)	Contributing Substations
Huddersfield	16.57	87.62	Oakes Road, Birkby, Folly Hall, Grove Street, Emerald Street, St Andrews Road, Deighton, Dalton, Milton Place, Horbury, Denby Grange

The 2018/2019 available capacity has been taken from Northern Power Grid's Long Term Development Statement (Nov 2014) and is the sum of the contributing substations in the area. The available capacity has been provided in Megavolt amperes, which is the stored electrical capacity within the substation. MW's and MVA are comparable, other than for a power factor, which is a measure of the efficiency associated in converting the electricity to useable power, typically between 0.8-0.95. This means that the available capacity should also be reduced by the power factor. As a whole, the Huddersfield sub area appears to have sufficient capacity to support the proposed developments. The area is also well covered by the Northern Power Grid 33kV network and hence only modifications to the local distribution network are envisaged.

The Huddersfield sub area contains two proposed strategic sites: Land north of Bradley Road, Bradley, and Land north of Blackmoorfoot Road, Crosland Moor. These sites have been looked at in greater detail, to assess their individual demands against the available capacity within the substation in closest proximity. This assessment has been provided in Section 13.

Gas

The Huddersfield sub area is well served by the NGN local distribution network, by both an extensive low pressure (LP) network and a medium pressure gas mains. The maximum estimated demand for gas in the Huddersfield sub area is 34.24MW. Although exact capacity/storage within the network is not available, NGN state in their LTDS "We have an obligation to develop and maintain an efficient and economical pipeline system and, subject to that, to comply with any reasonable request to connect premises, provided that it is economic to do so."

As stated in section 5.2.2, a decline in total gas demand is forecast for the next ten years, which also accounts for growth in the area. In terms of general capacity, it is envisioned that no major upgrades will be required out of line with typical maintenance of the network. Local connections into developments will be paid for by the developer.

The Land north of Bradley Road, and Land north of Blackmoorfoot Road, Crossland Moor strategic sites are only serviced by low pressure networks and may require upstream reinforcement. A full network analysis to be undertaken by NGN is recommended to assess this.

5.5.3 Dewsbury and Mirfield

Quantum of Development

The development quanta for the Dewsbury and Mirfield sub area outlined by Kirklees Council is shown below:

Number of new housing units	4,335
Office Space (m ²)	55,845
General Industry (m ²)	65,153
Warehousing (m ²)	65,153

The Dewsbury and Mirfield sub area includes the strategic sites Land East of Leeds Road, Shaw Cross, and Land south of Ravensthorpe Road, Thornhill Lees, Dewsbury.

Electricity

The electrical demand generated by the proposed developments compared with the capacity of the substations in the area is shown below:

Sub-Area	Electrical Demand (MW)	Available Capacity - 2018/2019 (MVA)	Contributing Substations
Dewsbury and Mirfield	14.90	33.48	Park Road, Mirfield, Calder Wharf, Thornhill

As with Huddersfield, the existing network within the Dewsbury and Mirfield sub area appears to have sufficient capacity to support the proposed developments. The developments are within close proximity to each other and are well served by the NPG 33kV network. Only minor modification and connections to the local distribution network are envisaged.

The Dewsbury and Mirfield sub area contains two proposed strategic sites: Land East of Leeds Road, Shaw Cross, and Land south of Ravensthorpe Road, Thornhill Lees and Dewsbury. These sites have been looked at in greater detail, to assess their individual demands against the available capacity within the substation in closest proximity. This assessment has been provided in Section 13.

Gas

As with the Huddersfield sub area, the Dewsbury and Mirfield sub areas is also well served by the NGN local distribution network, by both an extensive low pressure (LP) network and a medium pressure gas mains. The maximum estimated demand for gas is **31.37MW** and in terms of general capacity, it is envisioned that no major upgrades will be required out of line with typical maintenance of the network. Local connections into developments will be paid for by the developer.

The strategic sites Land East of Leeds Road, Shaw Cross, and Land south of Ravensthorpe Road, Thornhill Lees, Dewsbury are both served by low pressure networks, however medium pressure mains are within 0.5km's if extensions into the developments were to be required.

5.5.4 Batley and Spen

Quantum of Development

The development quanta for the Batley and Spen sub area outlined by Kirklees Council is shown below:

Number of new housing units	3217
Office Space (m ²)	73,081
General Industry (m ²)	85,261
Warehousing (m ²)	139,361

Electricity

The electrical demand generated by the proposed developments compared with the capacity of the substations in the area is shown below:

Sub-Area	Electrical Demand (MW)	Available Capacity - 2018/2019 (MVA)	Contributing Substations
Batley and Spen	16.97	73.02	Heckmondwike (SP), Liversedge, White Lee, Burnleyville, NAB Lane, Gildersome Bradford Road, Snelsins Lane, Spensborough

The existing network within the Batley and Spen sub area appears to have sufficient capacity to support the proposed developments. However, despite the proposed developments being located within close proximity of each other, the NPG 33kV network does not extend to all individual subtowns, notably Birkenshaw and Batley. Extension of this network is likely to be required to reach these development areas, although this will be in the range of two to three kilometres.

Gas

As with the entire Kirklees area, the Batley and Spen sub area is also well served by the NGN local distribution network, by both an extensive low pressure (LP) network and a medium pressure gas mains. The maximum estimated demand for gas is 31.37MW and as with the other sites capacity within the network is not envisioned to be an issue.

5.5.5 Kirklees Rural

Quantum of Development

The development quanta for the Kirklees Rural sub area outlined by Kirklees Council is shown below:

Number of new housing units	4,386
Office Space (m ²)	40,134
General Industry (m ²)	46,823
Warehousing (m ²)	64,720

Electricity

The electrical demand generated by the proposed developments compared with the capacity of the substations in the area is shown below:

Sub-Area	Electrical Demand (MW)	Available Capacity - 2018/2019 (MVA)	Contributing Substations
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Kirklees Rural	13.62	67.01	Meltham, Honley, Scholes, Scissett, Hazlehead, Woolley
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As is the case with the other sub-areas, there is enough electrical capacity within the existing network to support the future development in Kirklees Rural. New cabling routes will need to be considered as there is less of a presence of an electrical distribution network in the area.

Gas

As with the electrical network, there is less of a presence of a gas network in the Kirklees Rural sub area as the developments are sparse. However, the NGN network appears to reach all development areas. The estimated gas demand is 28.70MW. As there is no major singular development it is predicted that the existing network will have no capacity issues serving the proposed developments.

5.6 Water Infrastructure

5.6.1 Water Supply

Through a discussion with Yorkshire Water it has been confirmed that the Yorkshire Grid water supply system can support the proposed level of housing and employment growth.

5.6.2 Waste Water

Through discussion with Yorkshire Water it has been confirmed that there is adequate waste water treatment capacity to meet the requirements of the planned housing and employment. There are planned quality and capacity improvements at Meltham, Clayton West and Neiley (Holmfirth) WwTW.

If further capacity is required Yorkshire Water will work closely with Kirklees Council and the developer to agree a phased approach to delivery and an agreement on the required upgrade works. Yorkshire Water seeks to align investment plans with development needs. If growth within a waste water catchment requires an increase in capacity at the receiving Works (or in some cases the sewerage network) which is not otherwise subject to investment (for example to meet new water quality requirements) Yorkshire Water will work with Kirklees to ensure that the development is appropriately phased to ensure that it is not occupied/operational until the necessary infrastructure in place.

5.7 Summary of Utility Infrastructure

5.7.1 Electricity

- In general, there is sufficient capacity within the existing NPG electrical distribution network to support the proposed developments
- The majority of the work required will be connections to existing local distribution networks

- Extension of the existing 33kV NPG network may be required in Kirklees Rural and Batley and Spen, as there is less of a presence of a network in these areas. Existing NPG substations are shown on Figure 5.4.
- Upgrades to the substations around Huddersfield Strategic Site: Land north of Bradley Road, Bradley will be required to support the development, including Brighouse 11kV, Deighton and Emerald Street

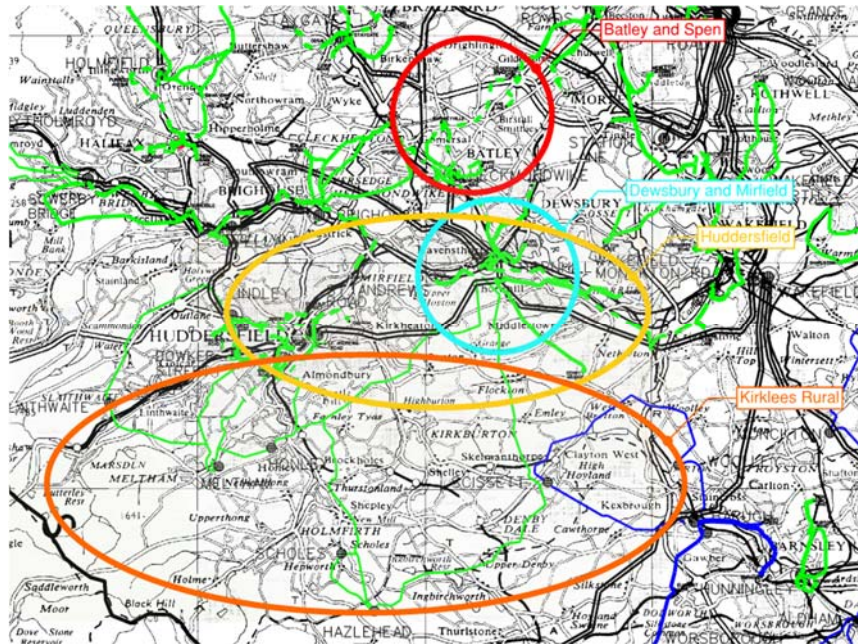


Figure 5.4 Sub Areas shown over map of NPG Substations (Green lines are 33kV lines, Blue lines are 66kV lines, Black lines are 132kV lines)

5.7.2 Gas

- In general, capacity within the network to serve the proposed developments is not envisioned to be an issue
- The entire area, including the Kirklees Rural developments, is well covered by the NGN network
- The majority of works will be associated with local connections into each of the developments
- Developers will pay for these local connections. If it is necessary to reinforce the network upstream of the connection point, an Economic Test is applied to these costs by NGN.
- Network modelling of the developments by Northern Gas Networks should be undertaken to identify any isolated upgrade/reinforcement work required, most likely to be associated with the development of the larger strategic sites

5.7.3 Water

Through a discussion with Yorkshire Water it has been confirmed that the Yorkshire Grid water supply system can support the proposed level of housing and employment growth.

5.7.4 Waste Water

Through discussion with Yorkshire Water it has been confirmed that there is adequate waste water treatment capacity to meet the requirements of the planned housing and employment. There are planned quality and capacity improvements at Meltham, Clayton West and Neiley (Holmfirth) WwTW.

If growth within a waste water catchment requires an increase in capacity at the receiving Works (or in some cases the sewerage network) which is not otherwise subject to investment (for example to meet new water quality requirements) Yorkshire Water will work with Kirklees to ensure that the development is appropriately phased to ensure that it is not occupied/operational until the necessary infrastructure in place.

The required utility infrastructure delivery is set out in Table 5.1 and the Infrastructure Delivery Programme in Section 16.

Table 5.1 Summary of Utility Infrastructure (see Table 16.1 for further details)

Ref	Location	Scheme	Essential / Desirable	Lead delivery agency	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding
U1	Kirklees Rural	Electricity Upgrades in Kirklees Rural	Essential	Developer Northern Powergrid	Developer Northern Powergrid	£unknown	Dependent on delivery of growth.	No gap
U2	Batley and Spen	Electricity Upgrades in Batley and Spen	Essential	Developer Northern Powergrid	Developer Northern Powergrid	£unknown	Dependent on delivery of growth.	No gap
U3	Huddersfield	Electricity Upgrades in Huddersfield	Essential	Developer Northern Powergrid	Developer Northern Powergrid	£unknown	Dependent on location and phasing of growth	No gap
U4	District wide	Potential Gas Reinforcements	Essential	Developers Northern Gas Network	Developers Northern Gas Network	£unknown	Dependent on location and phasing of growth	No gap
U5	Kirklees Rural	Wastewater Capacity Improvements	Essential	Yorkshire Water	Funded through Yorkshire Water AMP 6.	£unknown	Short term (0 -5 years)	No gap
U6	District Wide	Wastewater Capacity Improvements (if required)	Essential	Developer Yorkshire Water	Developer Yorkshire Water	£unknown	Dependent on location and phasing of growth	No gap

6 Waste Management

6.1 Data Sources

This section covers provision of waste management infrastructure.

The following sources of information have been used to populate this chapter:

- Municipal Waste Management Strategy 2006.
- Waste Needs Assessment Part 1: Waste Arisings and Review of Cross-Boundary Movements (Urban Vision, 2015).
- Waste Needs Assessment Part 2: Growth Forecasts and Assessments of Future Capacity Requirements (Urban Vision, 2015).
- Discussion with Waste Policy Team Lead, Kirklees Council.

6.2 Current and Fit for Purpose

In the Kirklees district there are eight main Household Waste Recycling Centres located in:

- Emerald Street Household Waste Recycling Centre (HWRC) & Composting Facility, Huddersfield.
- Kirklees Energy from Waste Facility, Vine Street, Huddersfield.
- Thornhill (Weaving Lane) Household Waste Recycling Centre (HWRC).
- Thornhill Waste Transfer Station.
- Kirklees Materials Recycling Facility (MRF), Vine Street, Huddersfield.
- Nab Lane HWRC, Birstall.
- Bent Ley Rd, Meltham.
- Bromley Farm HWRC, Upper Cumberworth.

Households in Kirklees are currently served by a two weekly recycling collection and two weekly general waste collection. The following recyclables can be placed in the recycling bin:

Newspapers and magazines	Books (remove hardback covers first)
Junk mail and envelopes	Plastic bottles (including pop, milk, cleaning etc.)
Cardboard	Drinks cans, food tins and empty aerosol cans
Telephone directories (including Yellow Pages)	

These facilities currently allow Kirklees to meet their current municipal waste demands.

6.3 Planned Schemes

There are no planned improvements to waste management facilities. Based on the waste requirements of the current population in Kirklees there would still be a requirement to provide additional Energy from Waste facilities following the scheduled closure of the Vine Street facility. This is discussed further below.

The improvements required relate to planned housing and employment and are set out in the section below.

6.4 Impact of Development

The impact of development section has not been split into the four Local Plan sub areas as waste management is managed at a district wide level and not on a sub area basis.

Kirklees Council has commissioned Urban Vision to review existing waste management facilities and projected waste arising's up to 2036; their report sets out four demographic / economic scenarios and also considers recycling rates. This report also considers cross boundary flows of waste.

Kirklees Council Officers have reviewed the scenarios used by Urban Vision and confirmed that the high growth scenario most closely links with their planned housing and employment growth, alongside an assumed recycling rate of 40%. Modelling work highlights both waste needs and the gap in provision for waste arising's across the plan period and beyond to 2036.

Based on this scenario planned growth in the Local Plan has the following implications to 2031:

Table 6.1: Kirklees Waste Arising's following a Median Recycling Growth Scenario:

Waste Management	Gap 2015	Gap 2031
Landfill (C+I and LACW)	78,020	81,552
Landfill (Hazardous)	-217,756	8,188
Landfill (CD&E)	-40,725	-72,916
Landfill (LACW Hazardous)	1,430	2,005
Energy from waste (Huddersfield EfW operating until 2031)	-46,301	-19,937
Energy from waste (Huddersfield EfW closes 2029)	-46,301	112,063
Thermal Treatment (without energy recovery)	5,649	4,777
Recycling (C+I, Agri)	18,279	77,286
Recycling (C+D)	77,714	90,810
Recycling (Specialist Materials)	-37,539	-30,056

Recycling (Hazardous)	20,522	24,008
Recycling (LACW)	5,944	33,606
Composting	13,070	15,489
Treatment plant	-22,480	-19,345
Other Treatment	30,480	34,550
Land recovery	-59,383	-28,713

Source: Kirklees Council 2015

Of particular note, this table highlights that there will be a considerable effect upon the level of waste arising's within the district once the Energy from Waste facility reaches the end of its operational life in 2029. The data included in Table 6.1 have informed the requirements in the district across the plan period. They are summarised below:

Energy from Waste (EfW): the existing contractual period for the EfW facility in Huddersfield runs until 2022/23. Based on the EfW facility not being available from this period the Urban Vision report identifies the need for a new EfW facility. Kirklees Council has considered the following options:

- Opportunity to extend the contractual period of the EfW until 2028 or even beyond this period (if the facility is fit for purpose for this longer period).
- Consider creating a single new EfW facility with neighbouring authorities.

Additional Material Recycling Facilities (MRF): there will be a requirement for two new MRFs, one in Huddersfield and one in North Kirklees, to serve the housing and employment sites in these locations. Kirklees Council are currently investigating potential sites of adequate size with good highway and access and proximity to the M62.

Landfill Capacity: There is currently a very low rate of waste that goes to landfill in Kirklees, due to the use of the EfW facility in Huddersfield. There is a need to safeguard some landfill capacity in the future. The Urban Vision report identifies the requirement to provide landfill capacity for both municipal, but mainly commercial waste. This could be provided through landfill capacity outside Kirklees or from the extension of the planning permission for an existing private landfill site at Kirkburton.

6.5 Summary of Waste Management Infrastructure

Kirklees Council has identified the waste management infrastructure required to serve the proposed new employment and housing sites and there are identified funding streams to deliver these new facilities. The required utility infrastructure delivery is set out in Table 6.1 and the Infrastructure Delivery Programme in Section 16.

Table 6.1: Summary of Waste Management Infrastructure (see Table 16.1 for further details)

Ref	Location	Scheme	Essential / Desirable	Lead delivery agency/ management organisation	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding
W1	District Wide	New Energy from Waste Facilities.	Essential	Kirklees Council Private waste firms	Private funding Kirklees Council tax	£unknown	Medium Term (5 -10 years) In place by 2022/23 or 2028 depending on extension of current contract.	No gap
W2	District Wide	Two new MRFs in North Kirklees	Essential	Kirklees Council Private waste firms	Private funding Kirklees Council tax	£30 - £60 million (for 2)	Medium Term (5 -10 years).	No gap
W3	District Wide	Additional landfill capacity.	Essential	Private waste firms	Private funding	£unknown	Short term (0 -5 years).	No gap

7 Telecoms

7.1 Definition and Data Sources

This section covers provision of Broadband and Mobile services to residents and businesses in Kirklees Council.

The following sources of information have been used to populate this chapter:

Local Strategies

- Meeting with Telecoms Lead at Kirklees Council
- Kirklees Council's Digital Connectivity Strategy 2014

Broadband service availability

- <http://www.superfast-openreach.co.uk/where-and-when/>
- <http://maps.thinkbroadband.com/>
- www.samknows.com

Mobile service availability

- <http://maps.ofcom.org.uk/mobile-services/>
- <http://consumers.ofcom.org.uk/phone/mobile-phones/4G/mobile-coverage-checker/>
- <http://opensignal.com>

7.2 Existing Infrastructure and Fitness for Purpose

7.2.1 Overview

Digital services have long been recognised as important for citizens' participation in society, the economy and the democratic process. Ofcom, the independent regulator and competition authority for the UK communications industries, works to encourage competition which has helped to deliver the three central goals of availability, take-up and effective use of key services.

OFCOM has recently launched a Digital Communications Review to:

“Ensure people get the best possible communications services, wherever they live and work... [OFCOM] want[s] to promote competition, investment and innovation, so that everyone benefits from even better coverage, choice, price and quality of service in years to come.”

With the proposed growth and regeneration of commercial, and residential developments within the Kirklees Council district, the Council's stated ambitions are:

1. All business will have access to world class business grade fibre.

2. Town centres will have free to access public Wi-Fi.
3. Residents will have access to superfast broadband (24Mb+) in their homes.
4. Tenants will have access to affordable broadband services.
5. 4G mobile data coverage across Kirklees.
6. Public sector services and partners will have high performance and future proof infrastructure on which to join-up, innovate and deliver.

This section focuses on ambitions 1, 3, 4 and 5 from the list above.

Broadband Telecoms services are provided across the UK by a great range of Internet Service Providers, however the vast majority of residential and Small & Medium Enterprise (SME) subscribers are served by one of five major providers – BT, Sky, Virgin Media, Talk Talk or EE. Together they account for over 98% of broadband subscriptions.

The underlying telecoms cables and equipment which provide access to those services are even more aggregated, with BT's, Sky's, Talk Talk's and EE's services all being provided over the same physical infrastructure, which is owned by BT's Openreach subsidiary.

Virgin Media own their own infrastructure which serves only their subscribers, and tends to be of higher speed than Openreach provided services.

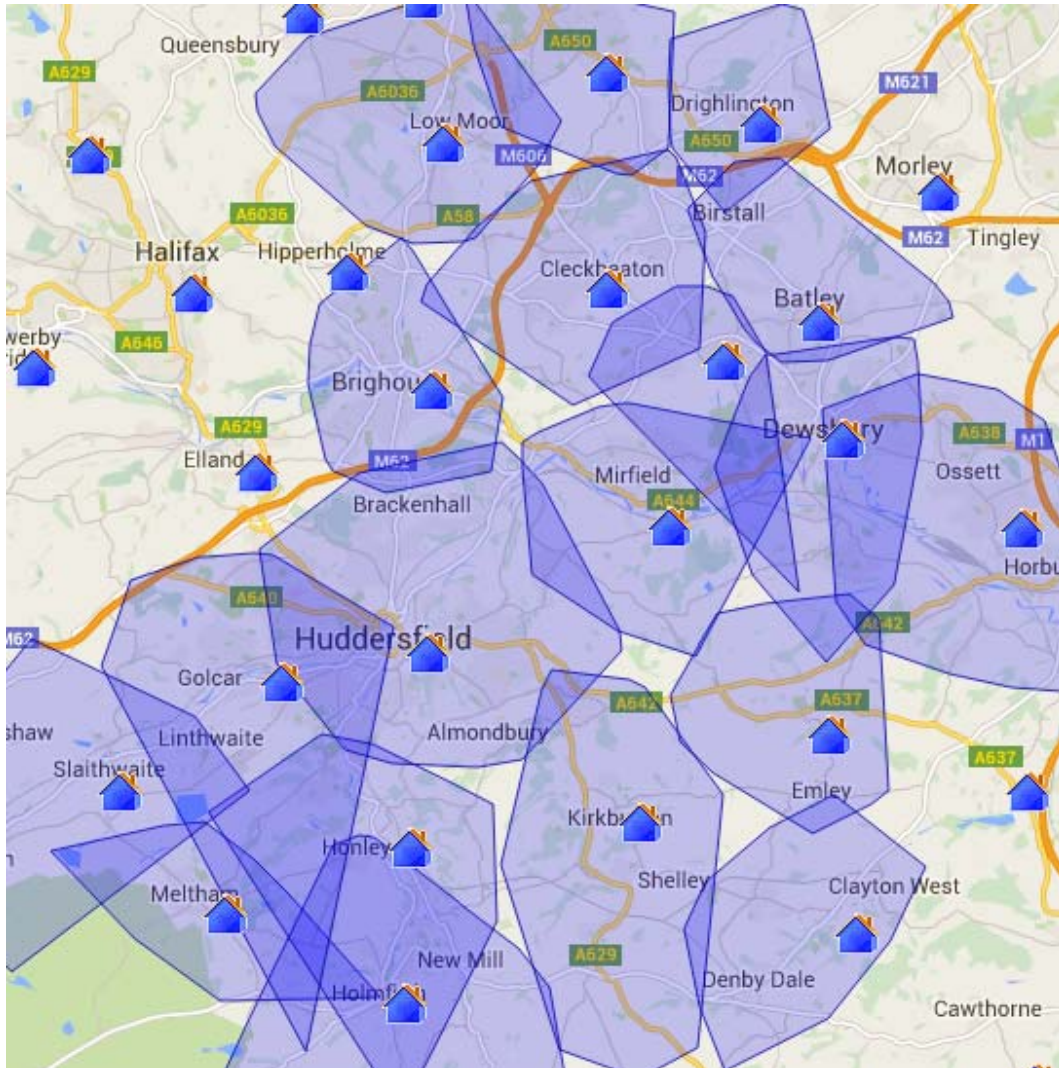
Other national operators, providing solely business grade fibre services, include KCOM, Level 3 and Vodafone (Cable & Wireless), and local fibre services are developing around the country to extend these networks.

2G, 3G and 4G mobile services are offered nationwide by four Mobile Operators (Vodafone, O2, EE and 3) who each own their own infrastructure of masts, antennas, and cabling across the country. Some virtual mobile operators (e.g. Giff Gaff, Tesco Mobile) offer attractively priced services which are technically delivered over one of the four Mobile Operators' physical networks.

7.2.2 Broadband services

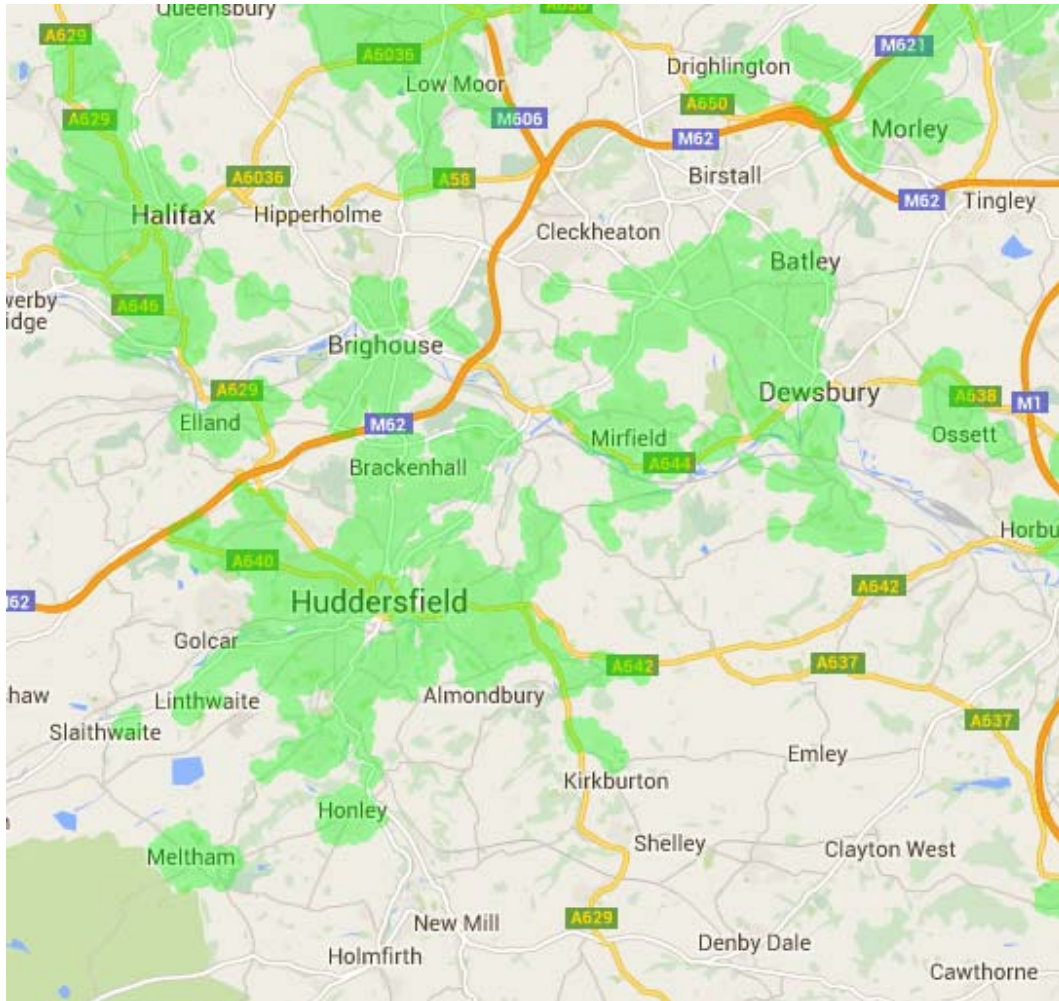
Kirklees Council's district is served by approximately 19 BT Openreach Exchanges. These are telecommunications hubs connecting homes and businesses across the district to telecoms providers' high speed connections to the internet. Most of these 19 exchanges are capable of providing subscribers with a choice of at least 4 internet providers, and many of the exchanges are also enabled to provide Openreach's Superfast broadband, known as Fibre to the Cabinet (FTTC). The exact extent of Openreach's FTTC deployment is not possible to ascertain from the available sources, and detailed discussions with Openreach would be recommended.

Figure 7.1 below shows approximate coverage areas of BT Openreach's exchanges.

Figure 7.1 Approximate BT Openreach Exchange coverage

Small gaps between coverage areas served by BT Openreach exchanges, do not imply that these areas receive no telephone or broadband service, but that it is likely they will not receive high speed services.

Virgin Media's coverage of the Kirklees area is more sporadic and does not match these coverage areas and is shown on Figure 7.2 below.

Figure 7.2 Approximate Virgin Media coverage

A summary services is shown below in Table 7.1:

Table 7.1: Summary of Telephone Exchanges

Sub Region ¹²	Exchange Name	Market Level	FTTC enabled?	Virgin Media
KR	Slaithwaite	4+ principle operators	Yes	Some areas
KR	Meltham	4+ principle operators	No	Some areas
KR	Holmfirth	4+ principle operators	Yes	Not Available
KR & H	Honley	4+ principle operators	No	Some areas
KR	Kirkburton	4+ principle operators	No	Some areas
KR	Skelmanthorpe	4+ principle operators	Yes ¹³	Not Available
KR	Flockton	BT Wholesale only	No	Not Available

¹² KR = Kirkless Rural, H = Huddersfield, D&M = Dewsbury & Mirfield, B&S = Batley & Spen

¹³ Also enabled for faster Fibre to the Premises (FTTP) services to some areas

Sub Region ¹²	Exchange Name	Market Level	FTTC enabled?	Virgin Media
H	Milnsbridge	4+ principle operators	Yes	Some areas
H	Huddersfield	4+ principle operators	Yes	Some areas
D&M	Dewsbury	4+ principle operators	Yes	Some areas
D&M	Mirfield	4+ principle operators	Yes	Some areas
B&S	Horbury Ossett	4+ principle operators	Yes	Some areas
B&S	Heckmondwike	4+ principle operators	Yes	Some areas
B&S	Batley	4+ principle operators	Yes	Some areas
B&S	Cleckheaton	4+ principle operators	Yes	Some areas
B&S	Drighlington	2 to 3 principle operators	Yes	Some areas
B&S	Brighouse	4+ principle operators	Yes ¹⁴	Not Available
B&S	Dudley Hill	4+ principle operators	Yes	Some areas
B&S	Low Moor	4+ principle operators	Yes	Some areas

Overall the area is well served by these exchanges and a good range of telecoms providers, with Kirklees Council's own estimates that 88% of premises have access to superfast broadband. Of the 22,000 premises that do not have access to superfast broadband, 2,600 (1.4%) are estimated cannot receive a usable service. Typically these would be expected to be primarily in the more rural parts of Kirklees Rural sub area.

Corporate level fibre services penetration is hard to ascertain, and would require detailed discussions with a range of providers.

Mobile Services

In order to ascertain the level of 2G, 3G and 4G services across Kirklees Council district, various sources were reviewed, including OFCOM, mobile providers' websites, and opensignal.com where individuals mobile phone users can self-report signal strength and services.

The following observations were made:

- Kirklees Council lies in the 95% or more premises category for 2G services.
- Kirklees Council lies in the 80-90% or more premises category for 3G services.
- 4G services are more concentrated on towns.

Overall the coverage seems to be similar in three of the sub regions areas: Huddersfield, Dewsbury & Mirfield and Batley & Spen. All appear to have very good coverage, with almost everywhere having 3G and most places having 4G.

However, the coverage in Kirklees Rural is much more variable. Although the whole of the sub area has very good 2G coverage, for 3G some areas only have it

¹⁴ Also enabled for faster Fibre to the Premises (FTTP) services to some areas

outside buildings, and some areas don't receive 4G services at all. The sub-settlements with the worst coverage according to the separate network providers' maps were Emley and Almondbury.

7.3 Planned Schemes

To support the ambitions of the Council, several planned interventions are underway.

BDUK Phase Two Improvements: A £13 million scheme to improve broadband across West Yorkshire and York. Kirklees district did not receive any funding through phase 1, and therefore are receiving 42% of the £13 million phase two funding. This seeks to deliver up to 24mb broadband and targets locations with poor broadband speeds. This means the focus is generally on rural areas. The BDUK scheme begins in September 2015 and is scheduled for completion by 2019.

Super Connected Cities Voucher Scheme: A scheme allowing businesses to access £3,000 of grant funding to subsidise access to fibre providers.

Kirklees Core: The delivery of a pure fibre network with Fibre to the Premises (FTTP) focused on employment locations. Kirklees Core is initially a commercial roll-out to businesses of all sectors. This project is about the delivery of City Fibre with IX in Leeds to attract inward investors requiring fast broadband of up to a gigabit. In the medium / longer term having a district wide, low latency connection into IX Leeds will attract inward investment for the growing markets of creative and digital, healthcare and financial services. Although the build is initially focused on Huddersfield, Batley and Dewsbury, once the backbone infrastructure is in place, City Fibre have the aspiration to roll it out across the whole of Kirklees by 2020. Having such an infrastructure will enable mobile solutions as mentioned elsewhere.

The focus on Kirklees Core is on the financial and healthcare sector, is part funded through the Super Connected Cities Voucher Scheme, and is centred on the Huddersfield, Dewsbury and Batley areas.

WYCA are currently working to secure additional funds from Europe for infrastructure and demand stimulation.

7.4 Impact of Proposed Development

7.4.1 Overview

Each individual developer will be responsible for securing telecoms services suitable for their own proposed development site. Typically this will result in each developer approaching broadband providers who will respond in piecemeal fashion. Previous experience of both housing and employment oriented developments suggests that the planning and ordering of telecoms services often comes very late in the design & construction programme. This can result in

developers delivering standard services from one or a limited number of operators.

The impact of the total volume, scale and timescales of proposed developments should be utilised by Kirklees Council to push the telecoms operators to take a more strategic view of the area, encouraging investment in faster services, rather than allowing them to default to their normal order-by-order assessment.

Overall broadband operators are likely to respond well to the proposed developments as they give them good opportunities for new residential and commercial subscribers.

Co-ordination of mobile operators' roll out is often something that is not seen as part of developers' responsibilities, so it is recommended that Kirklees Council engage with the four operators to encourage them to plan across the district, and particularly for the Kirklees Rural sub region.

Examination of Kirklees Council's strategic developments by sub area are outlined below. The assessment of strategic sites can be found in Section 15.

7.4.2 Huddersfield

As the largest town in the district, the proposed developments in the Huddersfield sub region will be well served by the existing infrastructure from broadband and mobile operators. The good geographic concentration of developments should allow for superfast broadband from multiple providers to be the norm for all developments.

7.4.3 Dewsbury and Mirfield

Dewsbury and Mirfield sub region has good provision of broadband and mobile services at the moment, though some proposed developments in more remote areas could fall between exchanges and struggle to attract attention from broadband operators to provide superfast services.

7.4.4 Batley and Spen

Proposed employment developments in the Batley and Spen sub region should be encouraged to develop their commercial fibre connection plans as early as possible. The sub region is served by a range of Openreach exchanges but is outside of the Kirklees Core initial deployment areas, so proposed developments could find it costly to attract and deploy suitable high speed services.

7.4.5 Kirklees Rural

Given its rural nature, the proximity of proposed developments to broadband services in Kirklees Rural will vary, with some likely to have difficulty in securing superfast broadband for residential developments.

7.5 Summary of Telecoms Infrastructure

In summary:

- Broadband services are generally good in most areas
- Rural premises in Kirklees Rural sub area should receive improved services through BDUK Phase 2 rollout
- Some Strategic Developments could be prompted to engage early with broadband operators to facilitate best possible services
- Mobile services are generally good in most areas, and attention should be focused on encouraging the operators to deploy 4G services in more rural areas.
- Kirklees Rural sub area likely to be difficult to engage operators in increasing their network, other than around larger scale housing developments and Clayton West employment development

The required telecom infrastructure delivery is set out in Table 5.1 and the Infrastructure Delivery Programme in Section 16

Figure 7.2: Summary of Telecommunication Infrastructure (see Figure 16.1 for full details)

Ref	Location	Scheme	Essential / Desirable	Lead delivery agency/	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding
TC1	District Wide	BDUK Phase 2	Essential	BDUK	BDUK	£5.5m	Short Term (0 – 5 years)	No gap
TC2	District Wide	Super Connected Cities Voucher Scheme	Essential	Kirklees Council WYCA	WYCA	£unkno wn	Short Term (0 – 5 years)	No gap
TC3	District Wide	Kirklees Core	Essential	City Fibre	Private Investment	£unkno wn	Short Term (0 – 5 years)	No gap
TC4	District Wide	Site by Site Broadband Investment	Essential	Developers	Developers Telecom Providers	£unkno wn	Across Plan Period	No gap

8 Flood Risk and Drainage

8.1 Definition and Data Sources

This section considers flood risk infrastructure in Kirklees including coastal, fluvial and surface water flooding infrastructure.

The following sources of information have been used to populate this chapter:

- Kirklees Preliminary Flood Risk Assessment (2009).
- Surface Water Management Plan (2011).
- Local Flood Risk Strategy (2012)
- Strategic Flood Risk Assessment (2008)
- Discussion with Kirklees Council Flood Risk Representatives.

8.2 Existing Infrastructure and Fitness for Purpose

The main agencies involved in the maintenance and provision of flood risk infrastructure include:

- **Environment Agency (EA):** responsible for fluvial flooding.
- **Kirklees Metropolitan Borough Council (Kirklees Council):** surface water, ordinary watercourses and groundwater.
- **Yorkshire Water (YW):** responsible for sewer management, reservoir safety and water supply and treatment.

The Local Flood Risk Management Strategy sets out the current context in Kirklees. The district has 27 large reservoirs, managed by Yorkshire Water, around 100km of main river, managed by the Environment Agency and substantial, but unrecorded lengths of minor watercourse.

The district is also crossed by several canals, managed by the Canals and River Trust, with a total length of 35km. The main rivers in the district are the Colne and the Calder flowing to the river Aire, which drains around 85% of the area, and the river Dearne, flowing to the river Don, draining the remaining 15%. Average annual rainfall figures for the district range from 1800mm at the Pennine headwaters to 800mm in Huddersfield.

8.2.1 Preliminary Flood Risk Assessment

The Flood Risk Regulations 2009 require Unitary and County Councils, in their role as Lead Local Flood Authority (LLFA), to take responsibility for the management of local flood risk. The Regulations prescribe a reporting process for LLFAs which involves the production of a Preliminary Flood Risk Assessment (PFRA) for their area, outlining the flood risk from local sources. The first PFRA has to be submitted to the Environment Agency by 22 June 2011. If the PFRA identifies significant Flood Risk Areas (FRAs), as defined by national

significance thresholds, further, detailed Flood Hazard and Risk Maps would be required by 22 June 2013 and a Flood Risk Management Plan by 22 June 2015.

The Preliminary Flood Risk Assessment (2009) (PFRA) process provides a high-level overview of flood risk from local sources, such as surface water, ordinary watercourses and groundwater. Flood risk from reservoirs and main rivers is the responsibility of the Environment Agency.

The threshold for significant flooding has been set at such a high level that Kirklees can make no case to identify a European significant Flood Risk Area within the PFRA. Whilst there is little evidence available to quantify specific flood risk, the report confirms that, some areas of Kirklees are at a high risk of surface water flooding from a rainfall event, with a 0.5% chance of occurring and affecting around 35,000 people.

The PFRA also notes that:

- Kirklees is one of 149 LLFA's in England, ranking 55th in terms of general flood risk.
- Excluding Counties and London Boroughs, Kirklees ranks 7th behind Hull, Birmingham, Brighton, Doncaster, Leeds and Leicester, in terms of the flood risk to be managed by the LLFA.
- 15,000 properties in the district are at risk from surface water flooding and 12,000 from Main River flooding.

8.2.2 Surface Water Management Plan

Kirklees Council prepared a Surface Water Management Plan (SWMP) in 2011.

The SWMP notes that surface water flooding is generally more prevalent in the hillier, rural, less developed south side of the district. The settlements along the Dearne, Holme, Colne and Woodsome Valleys are concentrated along the rivers and suffer the consequences of rapid surface water runoff from the uplands and fields on the steep valley sides. Formal drainage systems are sparse, often unrecorded and consequently, poorly maintained. The industrial heritage of the larger settlements as textile centres has left a historical legacy of stone culverts carrying surface water through areas of high residential occupation. Information on the location, condition and connectivity of the culvert systems is piecemeal but is a significant factor in understanding and reducing flood risk in those locations.

The SWMP notes that the large settlements to the centre and north of the district, Huddersfield, Dewsbury and Batley, have significant networks of public sewers, owned and maintained by Yorkshire Water, with less evidence of smaller culverted watercourses remaining in those areas. It is likely that the traditional means of draining surface water via watercourses has been gradually replaced by the developing public sewer system carrying rainwater in both surface water and combined sewers.

The Kirklees SWMP provides an evidence base for understanding surface water flood risk across the district. A district-wide, high-level, low-detail assessment of relative surface water flood risk has been carried out to provide a foundation for

future, more detailed assessment work, targeted at the areas where the risk is highest. The SWMP includes the following:

- Development of a formal drainage asset recording system for all the surface water systems in the district.
- Development of a flood incident recording system to build up an understanding of where flood risk is located.
- Representation of the asset and incident information in a graphical format to allow improved visibility and easy cross-referencing of the data.
- An assessment of local surface water flood risk using the above data, EA surface water maps, topographic/demographic information and site surveys.
- Representation of the relative surface water flood risk across the district in a format that is understandable and accessible by the general public.
- A prioritised programme for future detailed investigation of the higher risk areas.
- A suite of measures that could be employed to mitigate the risk in the higher risk areas.

An assessment of the risk from surface water flooding has been carried out on a 500m square grid across the district, ranking areas on relative flood risk. Risk factors include critical infrastructure (schools, hospitals, transport routes etc.), residential and commercial property density and the presence of historical flood incidents, coincident with the location of predicted flooding.

The results of the assessment highlight around 200 sqm areas, where the risk from surface water flooding could be significant and future, more-detailed investigation work could be beneficial. The areas are spread around the district but concentrations occur around Slaithwaite, Ravensthorpe, Dewsbury, Liversedge and the A62 Leeds Road corridor at Deighton. The SWMP includes a five point Action Plan to tackle surface water flooding in the identified high risk areas. This action plan is about working with partners to agree mitigation measures, improving advice through the planning application process and bringing evidence streams together. The Action Plan will be reviewed regularly by Kirklees Council.

8.2.3 Local Flood Risk Strategy

Kirklees Council prepared a Local Flood Risk Strategy (LFRMS) in 2012. The strategy seeks to set the framework to co-ordinate the management of local flood risk and to ensure that the type and scale of local flooding is understood and explained, appropriate objectives have been set, measures to achieve the objectives have been determined and funding arrangements, including value for money for the measures, has been considered.

The Measures identified in the Kirklees LFRMS provide a long term programme of works and initiatives, such as planning controls, community engagement and improvement and maintenance work, which will be prioritised and programmed to deliver affordable reductions in local flood risk.

32 measures have been developed to address the objectives identified in the strategy. The measures are varied in nature, ranging from simple data recording to complex flood modelling, community information to changing community behaviour/perceptions. The measures include:

- Recording/mapping flood incidents
- Developing an information strategy to improve stakeholder knowledge
- Publishing and distributing information explaining flood risk responsibilities to local communities
- Establishing the SuDS Approval Body (a change in national guidance means that an increase emphasis on SuDS as part of the planning application process – SuDS approval bodies are no longer being progressed).
- Developing an affordable cyclical maintenance regime based on risk
- Developing a pragmatic programme of schemes and initiatives which are likely to be funded through the national funding programme
- Developing and implementing a policy on de-culverting

The main areas in the district at higher risk of flooding are shown in Table 8.1

Table 8.1: Areas at High Risk of Flooding

Settlement	Properties at Risk of Flooding
Huddersfield (Leeds Rd/Aspley)	6,800
Huddersfield (Dalton)	500
Holme Valley	2,500
Deerne Valley	600
Batley	1,600
Marsden	700
Dewsbury	2,500
Thornhill	700
Spenn Valley	3,000
Mirfield	500

8.2.4 Sustainable Drainage Systems (SuDS)

New regulations came into force in April 2015 to require SuDS to be agreed through the planning application process. This means developers will need to agree their SuDS with Kirklees Council and developers will need to meet certain SuD standards, as set out in Planning Practice Guidance. The guidance includes a hierarchy of acceptable discharge solutions with infiltration to the ground the most preferred and connection to sewers the least preferred (but still permissible).

8.2.5 Strategic Flood Risk Assessment

A Strategic Flood Risk Assessment (SFRA) was been produced j with Kirklees Council, Wakefield Council and Calderdale Council in 2008 called the Calder Valley SFRA. The SFRA was prepared to support the emerging Kirklees Core Strategy, which has now been withdrawn. The national guidance on preparation of SFRAs and applying the sequential and exceptions test have changed. Kirklees are therefore progressing an update to the SFRA, as set out in section 8.4.

8.3 Planned Schemes

Since producing the documents set out in section 8.2 Kirklees Drainage Officers have been developing a prioritisation tool to work out where existing flood risk could be tackled. The Kirklees Drainage team have prepared approximately 15 flood studies to develop schemes.

There are a number of proposed flood alleviation schemes in the Kirklees. They are at various stages of development and are being led by either Kirklees Council or the Environment Agency. They are set out in Section 8.5 and in the Infrastructure Delivery Programme in Section 16.

8.4 Impact of Proposed Development

In 2008 a joint Strategic Flood Risk Assessment (SFRA) was produced jointly between Kirklees Council, Wakefield Council and Calderdale Council. Since 2008 the national guidance on production of SFRA has changed and new Environment Agency flood mapping means that a new SFRA is required.

The three Councils are now jointly progressing an update to the Strategic Flood Risk Assessment (SFRA) level one. This is being progressed to feed into the emerging Local Plan, but is currently only at draft stage and therefore cannot be referenced in this report.

The flood risk and drainage issues in Kirklees will be managed through the sequential and exceptions tests on all future site allocation and through evidence provided through the emerging Strategic Flood Risk Assessment Level 1. A level two will be produced if required depending on final site allocations.

The Drainage team have made detailed comments on all that have been considered for inclusion in the emerging Local Plan. These have been used to assist the site allocation process.

Kirklees Council have been working with the other Local Authorities in West Yorkshire and City of York Council to develop a SuDS Developer Guide. This will be published in July 2015. The aim of this document is to give certainty to developers about what is required of them in West Yorkshire. The guidance document sets out the requirements, potential SuDS mechanisms to deliver the requirements and details of maintenance requirements.

Kirklees Council are considering whether Local Standards are needed to guide SuDS in Kirklees.

The mechanism being progressed by Kirklees to deliver SuDS schemes on individual sites is the use of S106 including maintenance contributions. The SuDS would be adopted by Yorkshire Water or private maintenance. Kirklees Council are not seeking to adopt SuDS.

8.5 Summary of Flood Risk and Drainage Infrastructure

Parts of the Kirklees district are at risk of flooding from fluvial and surface water sources. The Council is seeking to prioritise schemes to tackle these issues. There are a large number of proposed flood alleviation schemes in the Kirklees district, which are being promoted by Kirklees Council and the Environment Agency. The exact funding of the flood alleviation schemes is not yet confirmed. However Kirklees are seeking to make the case for 85% of the total cost of each scheme to be secured from Environment Agency Grant and Aid, with 15% partnership funding from other sources. The use of European Structural Funds is also being investigated. The required Flood Risk and Drainage infrastructure delivery is set out in Table 8.2 and the Infrastructure Delivery Programme in Section 16.

Figure 8.2: Summary of Flood Risk and Drainage Infrastructure (see Figure 16.1 for full details)

Ref	Location	Scheme	Essential / Desirable	Lead delivery agency	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding
F1	Batley & Spen	Batley Flood Alleviation Scheme	Desirable	Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£1.5m	Short Term (0-10 years) 2016-2023	To be determined
F2	Batley & Spen	Cleckheaton Flood Alleviation Scheme	Desirable	Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£1.7m	Short to Medium Term (0 – 10 years) 2018 to 2021	To be determined
F3	Dewsbury & Mirfield	Dewsbury Flood Alleviation Scheme	Desirable	Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£4.2m	Medium Term (2021 onwards)	To be determined
F4	Huddersfield	Huddersfield A62 Corridor Flood Alleviation Scheme	Desirable	Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£1.4m	Short Term (0-5 years) 2016 - 2018	To be determined
F5	District Wide	Kirklees Culvert Programme	Desirable	Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£970,000	Short Term (0-5 years) 2016 - 2018	To be determined

Ref	Location	Scheme	Essential / Desirable	Lead delivery agency	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding
F6	Batley & Spen	Liversedge Flood Alleviation Scheme	Desirable	Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£1.6m	Medium Term (2021 onwards)	To be determined
F7	Batley & Spen	Batley Beck Scheme Replacement – Culverts / Wall Repairs	Desirable	Environment Agency	EA Grant & Aid Funding Private contributions European Structural Funds	£5m	Medium Term (5 years-on) 2021 -	To be determined
F8	Dewsbury & Mirfield	Dewsbury Scheme Replacement	Desirable	Environment Agency	EA Grant & Aid Funding Private contributions European Structural Funds	£6.5m	Medium Term (2021 onwards)	To be determined
F9	Batley & Spen	Spennithorne Scheme Replacement	Desirable	Environment Agency	EA Grant & Aid Funding Private contributions European Structural Funds	£3m	Medium Term (2021 onwards)	To be determined
F10	Kirklees Rural	Clayton West and Scissett Flood Alleviation Scheme	Desirable	Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£300,000	Short to Medium Term (0 – 10 years) 2018 to 2021	To be determined
F11	Kirklees Rural	Holmfirth Flood Alleviation Scheme	Desirable	Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£500,000	Medium Term (2021 onwards)	To be determined
F12	Dewsbury & Mirfield	Ings Crescent Flood Alleviation Scheme	Desirable	Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£220,000	Short to Medium Term (0 – 10 years) 2018 to 2021	To be determined
F13	Huddersfield	New Mill Road (Brockholes) Flood Alleviation Scheme	Desirable	Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£40,000	Short Term (0-5 years)	To be determined
F14	Dewsbury & Mirfield	Ravensthorpe Flood Alleviation Scheme	Desirable	Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£1.4m	Short to Medium Term (0 – 10 years)	To be determined

Ref	Location	Scheme	Essential / Desirable	Lead delivery agency	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding
							2018 to 2021	
F15	Huddersfield	Grimescar Dike	Desirable	Environment Agency	EA Grant & Aid Funding Private contributions European Structural Funds	£175,000	Short Term (0-5 years)	To be determined
F16	Kirklees Rural	Kirklees Upland Catchment Management Scheme	Desirable	Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£100,000	Short Term (0-5 years)	To be determined
F17	Districtwide	Schools in Kirklees Flood Alleviation Scheme	Desirable	Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£50,000	Short Term (0-5 years)	To be determined
F18	Huddersfield	Blackhouse Dike Culvert	Desirable	Environment Agency	EA Grant & Aid Funding Private contributions European Structural Funds	£110,000	Medium Term (2021 onwards)	To be determined
F19	Kirklees Rural	Box Ings Culverts	Desirable	Environment Agency	EA Grant & Aid Funding Private contributions European Structural Funds	£165,000	Medium Term (2021 onwards)	To be determined
F20	Huddersfield	Crimble Clough Culvert	Desirable	Environment Agency	EA Grant & Aid Funding Private contributions European Structural Funds	£110,000	Medium Term (2021 onwards)	To be determined
F21	Kirklees Rural	Crowhill Culverts	Desirable	Environment Agency	EA Grant & Aid Funding Private contributions European Structural Funds	£165,000	Medium Term (2021 onwards)	To be determined
F22	Kirklees Rural	Marsden Culvert	Desirable	Environment Agency	EA Grant & Aid Funding Private contributions European Structural Funds	£170,000	Medium Term (2021 onwards)	To be determined
F23	Batley & Spennings	Spennings Culverts Replacement	Desirable	Environment Agency	EA Grant & Aid Funding Private contributions European Structural Funds	£220,000	Medium Term (2021 onwards)	To be determined
F24	Dewsbury & Mirfield	Mirfield Flood Alleviation Scheme	Desirable	Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£1.1m	Medium Term (2021 onwards)	To be determined

Ref	Location	Scheme	Essential / Desirable	Lead delivery agency	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding
F25	District wide	Ordinary Watercourses FRM	Desirable	Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£804,000	Medium Term (2021 onwards)	To be determined
F26	District wide	Property Cluster FRM	Desirable	Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£705,000	Medium Term (2021 onwards)	To be determined
F27	District wide	A number of further district wide schemes	Desirable	Environment Agency and Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	Approx. £30m	Medium Term (2021 onwards)	To be determined
F28	District wide	Delivery of new SuD responsibilities	Essential	Kirklees Council	Developer Funding	£unknown	Across Plan Period	No Gap

9 Education

9.1 Definition and Data Sources

This section covers the provision of primary and secondary schools. The following sources of information have been used to populate this chapter:

- The document, securing sufficient learning places to enable access for children and young people to an excellent local education system 2015-2018; and
- Meeting with Kirklees Council and representatives from the Council's Learning and Skills Service in June 2015.

Local Authorities have a statutory duty to secure early learning and childcare, primary and secondary places including specialist learning places. This section predominantly covers the statutory school age provision of primary and secondary education, but also includes wider areas as appropriate.

It should be noted that although Kirklees benefits from Huddersfield University and a number of further education providers within the district. This section does not cover further or higher education as these are less directly impacted by growth in the same way as primary and secondary provision.

9.2 Existing Infrastructure and Fitness for Purpose

9.2.1 Overview

The Council has a statutory duty to ensure that there are sufficient high quality school places to meet the needs of Kirklees families and communities; this is referred to as Basic Need.

Planning for sufficient learning places is reviewed on an annual basis and draws together the effects of changes in birth rate and the child population demographics extracted from GP registration data, with changes in housing, the migration of families between and within local authority areas, local geography and the exercise of parental preferences.

In line with Department for Education requirements, Local Authorities use planning areas that are reflective of the geographical makeup of Kirklees. The planning areas are localised into clusters of schools that match the spread and density of population. The planning areas correlate to the predominant patterns of parental preference, taking into account faith provision and reasonable travel distance.

There are 142¹⁵ primary schools within the Kirklees District. This includes academies and free schools, community schools, trust schools, voluntary aided schools and voluntary controlled schools. There are 25 secondary schools (including middle schools deemed secondary) within the district, again

¹⁵ Note: This figure is a total and does not disaggregate separate types of primary provision, e.g. Infant and Junior schools.

comprising academies and free schools, community schools, trust schools, voluntary aided schools and voluntary controlled schools. There are a further 6 special schools serving Kirklees.

Work by Kirklees Council to understand education needs across the plan period initially reviewed the school place planning document produced in house. This document outlines current capacity and existing trends and has been factored into the overall capacity planning.

The main factors affecting demand for school places are birth rates, in- and out-migration from the area, including arrivals new to the UK (including international students and their families, cross-border movement of children into schools in other local authorities, as well as children moving in from other local authorities changes in the housing market and new housing developments, parental preference, changes in those accessing private education provision, rural sustainability, and the impact of welfare reforms.

Many of these are subject to short-term uncertainty. So, for example, the housing market and associated family mobility may react quite quickly to any improvement or deterioration in the underlying economy.

The Council works in partnership with neighbouring local authorities so that patterns of pupil distribution can be understood. A number of duty to co-operate meetings have been undertaken to support this work.

Kirklees, alongside most other local authorities, has seen a significant change in the size of the school age population with an increase of almost 20% from approximately 5,000 per age cohort to almost 6,000 since 2000. The overall population increase figure masks a varied pattern of rapid growth in some areas of Kirklees and reduction in other areas. This variation in localised child populations means that in some places, such as the more rural areas of Kirklees, currently there may be a sufficient number of learning places whereas in other urban areas there has been a shortage of places that has and continues to require the provision of additional classes. In line with this there is growing pressure on the number of specialist school places. Special school places are kept under close review by the Council and where necessary changes are made to ensure adequate and appropriate provision is in place.

A significant limiting factor in planning new school schemes is the availability of basic government grant. Local Authorities are required to submit an annual return about pupil projections to the Department for Education (DfE). As part of this process, only sites with consented planning permissions are allowed to be included for forecasting purposes.

9.2.2 Primary School Provision

The pupil population data highlights that there was a requirement for up to 2,100 (10 classes of entry) additional places across the north, north-west, west and south-west areas of Huddersfield, Dewsbury West and Heckmondwike. In addition, opportunities have been sought to consolidate additional and/or secure places at individual schools where for example, this supports school organisation,

regularisation of planned places and in some instances supporting temporary pressure i.e. a ‘bulge’ class.

Sufficient primary capacity has been made available for September 2013 and 2014 by using three strategies:

- In collaboration with schools, admitting a small number of pupils above the Planned Admission Number (PAN) where this could be achieved without breaching the KS1 class size regulations.
- In collaboration with schools, putting in place one-off ‘bulge’ classes (or part classes) that have revenue implications.
- In collaboration with schools establishing additional classes/phases as part of a long term expansion strategy.

A scheme is underway to build a brand new school building to accommodate the 420 primary places at Royds Hall Community School.

The Council is currently seeking proposals in order to establish a new 630 place primary free school (academy) to serve Huddersfield South West from September 2016. This will require a brand new school building to be built.

There is an urgent need for a further 420 primary places to serve Huddersfield North. Discussions with school leaders in the area are underway to explore potential solutions this will require a brand new school building.

Contextually, the outline cost of a 2 form entry new school building 1 (excluding the purchase price of the site) is around £8.5m.

9.2.3 Secondary School Provision

The pupil population data showed that there was not the immediate requirement to plan for additional pupil places. Evaluating the need from 2016/17 and beyond will need to come into focus as the growth in pupil population begins to move to the secondary sector.

Kirklees had sufficient secondary school places for September 2013 and 2014, with unfilled places in several areas of the authority. The number of young people in Year 7 and Year 8 in 2013 was at the minimum of the population “dip”.

At National Offer Day, the number of young people that were allocated places for Year 7 in September 2015 exemplifies the anticipated increase. Secondary provisions in some planning areas have some unfilled capacity, but this is beginning to come under pressure and strategies will need to be developed in the next 3-5 years.

The numbers of young people leaving secondary schools at the end of Year 11 will remain in excess of the numbers of Year 7 pupils joining the secondary phase of schools until 2016-17. The exercise of parental preference means that nearly half of the secondary schools are oversubscribed; some with waiting lists in excess of 100, but the data shows that this reflects the demand for places at popular schools which are drawing pupils from a wide geographical area. Whilst parents are able to choose a school preference, and therefore able to secure places

at schools outside their immediate geographical area, when planning for Basic Need this must be based predominantly upon areas where the pupil population lives. It is important to acknowledge therefore that oversubscription is not necessarily a true indication that there are insufficient places.

9.2.4 Planned Schemes

Kirklees is currently considering reviewing a range of strategies to ensure sufficient learning places are secured in line with projected pupil numbers, including where appropriate the potential for 'free schools' as a mechanism to deliver learning places. Other planned strategies include working with schools to review admissions policies and Priority Admission Areas to provide greater flexibility for families whilst also providing value for money solutions.

As part of the on-going Local Plan learning place modelling exercise, if the requirement of a new school is identified, the safeguarding of specific sites would be preferable.

9.2.5 Impact of Proposed Development

9.2.6 Overview

As part of the on-going education infrastructure work, the accepted site options for the draft Local Plan have been considered. As the Local Plan develops, continued analysis considering indicative phasing and growth will enable the Learning and Skills team to model likely capacity impacts.

9.2.7 Huddersfield

There is already significant pressure for school places in the planning areas that include Huddersfield North, North West and South West. It is therefore likely that additional growth in these areas will place additional pressure on basic need.

In order to achieve the proposed quantum of growth Kirklees would explore the potential to provide on-site primary provision in line with anticipated need set out within the Local Plan.

Kirklees are currently exploring the potential to provide on-site primary provision at the Land north of Bradley Road, Bradley, and Huddersfield. Given the already identified need for Huddersfield North, this would be key to support the strategic development.

As identified previously, the Council is currently seeking proposals in order to establish a new 630 place primary free (academy) school to serve Huddersfield South West from September 2016. This may go some way towards meeting local demand however further work will be required to ascertain the true impact of this strategic site, given GP registration data indicates that this continues to be an area of growth.

It should be noted however that this demand must be assessed with other contextual factors for example parental preference. An annual review that

assesses the demand for learning places is carried out. This review will continue to inform the likely impact of growth as a result of the Local Plan.

9.2.8 Dewsbury and Mirfield

Previous sufficiency issues based on known basic need have already been largely addressed, particularly in the planning area of Dewsbury West.

Further work will need to be undertaken to understand the impact of both the strategic site at Land East of Leeds Road, Shaw Cross, Dewsbury as well as that of Land south of Ravensthorpe Road, Thornhill Lees, Dewsbury. Given the scale of both of these developments, it is very likely that additional primary and secondary provision will be required. Further work will need to be undertaken to understand the impact of this allocation and the effect on neighbouring primary schools. It should be noted however that masterplan for the Land East of Leeds Road, Shaw Cross, Dewsbury site currently shows provision for a potential new primary school building. As proposals develop, the Kirklees Council Local Plan team will need to work with Learning and Skills colleagues to understand whether the provision and proposed size of a new primary school building will fully satisfy future need arising in this area. In terms of secondary provision across Dewsbury the potential for exploring additional growth at one or more secondary schools will continue to be assessed.

9.2.9 Batley and Spen

It is likely that there will be impacts on education provision as a result of growth in the Batley and Spen area. Further work will need to be undertaken to understand the impact of allocations in these areas and the effect it will have on existing primary and secondary school capacity.

In Batley and Spen, Kirklees Council is currently exploring the potential for additional primary school places. In the context of the Local Plan and as modelling work advances a fuller understanding of the exact needs and requirements will emerge and this will establish whether additional capacity is required as a result of the strategic sites.

9.2.10 Kirklees Rural

There are currently no plans to create additional capacity across the Kirklees Rural area.

In general there are sufficient places currently available to meet basic need and it is anticipated that the potential demand for places will remain broadly static, as the schools are popular and oversubscribed, despite the NHS data presently indicating a downward trend. However, it should be noted that many schools serve small rural settlements. Therefore the impact of development in these areas on education provision may be lower as there will likely be sufficient capacity within the existing school provision to accommodate additional pupils.

Further work will need to be undertaken to understand the impact of allocations in this area and the effect it will have on existing school capacity.

9.3 Summary of Education Infrastructure

The potential for strategic development across areas of Kirklees is likely to further increase the pressure for sufficient learning places, particularly in current areas of high demand. Being an authority that consists of a mix of urban and semi-rural settlements, the geography of Kirklees is an important contextualising factor in understanding the impact of areas of growth.

Notwithstanding unfilled capacity in some areas it is acknowledged that in order to realise the growth within the district that the Local Plan is aiming to achieve, there will be a gap in provision that will need to be addressed.

Kirklees Council is currently evaluating the need to include new learning places across a range of their strategic sites. Further work is necessary to understand fully whether all of these sites will be needed. Should they be deemed to be a firm requirement it is possible in some instances that they will be delivered by the site's developer.

Table 9.1: Summary of Education Infrastructure (see Figure 16.1 for full details)

Ref	Location	Scheme	Essential / Desirable	Lead delivery agency	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding
E1	District Wide	Planned New Schools	Essential	Kirklees Council	Basic Grant Allowance Direct funding for Department for Education for Academies. S106	£unknown	Short term (0 - 5 years).	No gap
E2	District Wide	Local Plan Modelling Education Needs	Essential	Kirklees Council	Kirklees Council	£unknown	Short term (0 - 5 years). Autumn 2015	No gap
E3	District Wide	Delivering the school places identified through the Local Plan Education Needs Modelling exercise.	Essential	Kirklees Council	Basic Grant Allowance. Direct funding for Department for Education for Academies. S106 / CIL Delivery by developers on Strategic Sites	£unknown	Throughout plan period	Potential Gap, but funding sources available.

10 Health and Wellbeing

10.1 Definition and Data Sources

This section covers the health provision, including GP surgeries and hospitals.

The following sources of information have been used to populate this chapter:

- Kirklees Joint Strategic Needs Assessment ('JSNA'), 2013
- Discussion with Kirklees Council Public Health Representatives, North Kirklees Clinical Commissioning Group and Greater Huddersfield Clinical Commissioning Group.
- Joint Health and Wellbeing Strategy.
- Rapid Health Impact Assessment and a Comprehensive Health and Wellbeing Impact Assessment for Planning Tool

10.2 Existing Infrastructure and Fitness for Purpose

10.2.1 Overview

The Kirklees Joint Strategic Needs Assessment, 2013 and Joint Health and Wellbeing Strategy provides an evidence base of health concerns in the district. The document directly influenced key strategies and plans including the Children and Young People's Plan, Adults Commissioning Strategy and Clinical Commissioning Group Strategic Plans. The JSNA also influenced action and informed local people about the health and wellbeing picture of Kirklees. The findings of the JSNA have been used by Kirklees Council and the Clinical Commissioning Groups to consider future health needs.

The Kirklees Joint Strategic Needs Assessment (JSNA) describes a wide range of health and wellbeing issues affecting people across Kirklees and identifies key themes that impact locally. The key issues identified by the JSNA that are relevant to the emerging Local Plan include:

Work and skills	Dependency	Chronic lung disease
Housing	Community capacity	Asthma
Being/feeling safe	Food	People with mental health issues
Obesogenic environment	Physical activity	Older people
Social connectedness	Alcohol	

The Health and Wellbeing Board has been meeting since 2013. This board includes representatives from Kirklees Council, the NHS Greater Huddersfield CCG, the NHS North Kirklees CCG and other partners. The board discuss existing health issues and preventive and reactive measures to tackle health issues. This includes health issues relating to land use, e.g. physical activity, obesity, etc. and underlying social issues.

The Kirklees District is served by two Clinical Commissioning Groups (CCGs):

- NHS Greater Huddersfield CCG: covering Huddersfield and Kirklees Rural.
- NHS North Kirklees CCG: covering Batley / Spen and Dewsbury / Mirfield.

10.2.2 Greater Huddersfield Clinical Commissioning Groups and Hospitals

The following hospitals are covered by Greater Huddersfield CCG:

- Huddersfield Royal Infirmary (Calderdale and Huddersfield NHS Foundation Trust).
- Acre Mills, Outpatients Appointments only (Calderdale and Huddersfield NHS Foundation Trust).
- Calderdale Royal Hospital (Calderdale and Huddersfield NHS Foundation Trust and in Calderdale District).
- Holme Valley Memorial Hospital (Calderdale and Huddersfield NHS Foundation Trust).

There are the following private hospitals in the CCG area:

- Huddersfield Hospital.

There are GPs surgeries located across the Greater Huddersfield CCG area.

Greater Huddersfield CCG includes 38 GPs surgeries operating out of 45 practices (due to branch practices). The GP provision in Huddersfield Town Centre does not meet modern GP standards as many operate out of terrace houses. Greater Huddersfield is a level 2 CCG. This means that they jointly commission services with NHS England.

The provision in Kirklees Rural has received investment in the past and there are fewer fit for purpose issues. Greater Huddersfield CCG are currently working with Prop Co (NHS Property Services) to understand where there are existing issues with the GP premises and developing an estate strategy including considering underused space.

The Greater Huddersfield CCG has capacity issues in the primary care workforce, as there is a shortage of GPs and the CCG struggles to attract new recruits.

10.2.3 North Kirklees Clinical Commissioning Groups and Hospitals

The following hospitals are covered by North Kirklees CCG:

- Dewsbury and District Hospital (The Mid Yorkshire Hospitals NHS Trust).
- Pinderfields General Hospital (The Mid Yorkshire Hospitals NHS Trust and in Wakefield District).
- Pontefract General Infirmary (The Mid Yorkshire Hospitals NHS Trust and in Wakefield District).

There are the following private hospitals in the CCG area:

- Spire Dewsbury Clinic.

North Kirklees is currently undertaking a review of their current hospital and GP stock to confirm any quality and delivery issues with existing stock. This is being carried out by Prop CO the NHS property services as part of the Department for Health Initiative. This should report in August 2015.

North Kirklees is a level one CCG. This means that the NHS England team still has responsibility for some commissioning including GPs. All the GPs in the CCG areas are part of a GP Federation Group called CURO Health. The CCG are using this group as a mechanism to engage with all practices to discuss a Department for Health initiative called the 'Five Year Forward View'.

10.3 Planned Schemes

10.3.1 North Kirklees

North Kirklees are currently undertaking a review of their current hospital and GP stock to confirm any quality and delivery issues with existing stock. This is being carried out by Prop CO the NHS property services as part of the Department for Health Initiative. This should report in August 2015.

They are setting out a vision to deliver a service focusing on services in the right place, at the right time and by the right person. This considers estate solutions and is set out in a document called 'meeting the challenge', which has set out options to deliver efficiencies and rationalise estates based on a three year programme. This programme is underway and has involved services being moved between Dewsbury, Pontefract and Pinderfields Hospitals and some land disposal at Dewsbury Hospital.

The CCG will work with GPs to discuss options for providing primary care, which will have implications for infrastructure. There is a need to change the way primary care is delivered as the aging population in an area cannot be serviced by the current model. The approach is still being developed, but will consider the following:

- Flexible multi use premises adaptable to service needs.
- Closer working relationship with NHS property services.
- Support staff and patients.
- Care provided closer to home to reduce patient stress.
- Integrated use of technology and infrastructure that allow for flexible working.
- Close working between clinicians / patients and clinicians to clinicians.
- Patients involved in decision making about their care.
- Premises in North Kirklees meet minimum regulatory requirements.
- Maximum use of NHS property and efficient use of space.

- Primary care at scale to allow economies of scales to be achieved.
- Rationalisation of estates and efficient use of infrastructure.
- Allow patients to self-care (e.g. online using ‘my health care hub’).

10.3.2 Greater Huddersfield

There are existing quality issues in the GP surgeries around Huddersfield Town Centre related to five premises. Greater Huddersfield CCG are therefore considering the options to provide improved facilities. This is likely to consider co-location of health services or a new health centre. The CCG are currently considering a number of options, including the Former Kirklees College Site. There is currently no committed funding for this scheme. Whilst the National Infrastructure Fund could be targeted to provide capital funding there is currently no funding pot to fund the increased rent and maintenance costs.

Greater Huddersfield CCG are currently working with Prop Co (NHS Property Services) to understand where there are existing issues with the GP premises and develop an estate strategy including considering underused space. This is likely to mean bigger practices in fewer buildings. This approach is also set out in the emerging Primary Care Strategy. It should be noted that this approach does not factor in proposed housing allocations in Kirklees.

Greater Huddersfield CCG have secured capital and revenue costs to build a new premises for the Bradford Road Medical Centre as the current premises are not fit for purpose. The funding and development site is secured.

10.4 Impact of Proposed Development

Health infrastructure is operated at a district wide and beyond scale, therefore the impact of proposed development has been assessed on a district wide level.

Kirklees Council Public Health team has commented on the site selection process for the draft Local Plan. This approach focuses on five health indicators from the Joint Strategic Needs Assessment. The following indicators were chosen:

- Obesity – adults and children
- Physical activity levels
- Rates of emergency admission due to respiratory disease
- Rates of adults feeling lonely or isolated in the over 65s
- Rates of adults feeling lonely or isolated in the under 65s

Although not part of this process, the impact of development upon air quality has been considered by Kirklees Environmental Health team and their input has been incorporated as part of the site options assessment of sites in the draft Local Plan.

It was then agreed that any wards in Kirklees that ranked within the top 5 on any of the indicators above would be include public health input as part of the site

assessment process. In addition, if any of the wards ranked within the top 5 of the Index of Multiple Deprivation, this was also indicated, as a 'sense check'.

The following measures were factored into the site assessment process:

	Housing	Employment
Obesity	<p>Ensure there are adequate physical activity opportunities, e.g. open spaces that are fit for purpose and that apply the Kirklees Open Spaces Standards, to enable increases in physical activity such as walking, Forest Schools, natural play. Infrastructure enabling active travel, playing pitches, etc.</p> <p>Restrict the numbers of fast food takeaways.</p> <p>Ensure that developments include opportunity to grow fruit and vegetables, i.e. community gardens, allotments</p>	<p>Ensure that there are adequate physical activity opportunities in close proximity to the employment site to enable employees to incorporate physical activity into everyday lives, i.e. beginning and end of day and lunchtimes. Ensuring that there are appropriate active travel routes to site. Ensuring that travel plans include active travel. Ensure that employers promote physical activity and healthy eating. Provision of Cycle to Work Schemes, pool bikes, electric pool cars, walking groups. Ensuring that sites are not built on open spaces that are currently well used for physical activity.</p>
Physical Activity	<p>Ensure there are adequate physical activity opportunities, e.g. open spaces that are fit for purpose and that apply the Kirklees Open Spaces Standards, to enable increases in physical activity such as walking, Forest Schools, natural play. Infrastructure enabling active travel, playing pitches, etc.</p>	<p>Ensure that there are adequate physical activity opportunities in close proximity to the employment site to enable employees to incorporate physical activity into everyday lives, i.e. beginning and end of day and lunchtimes. Ensuring that there are appropriate active travel routes to site. Ensuring that travel plans include active travel. Ensure that employers promote physical activity. Provision of Cycle to Work Schemes, pool bikes, electric pool cars, walking groups. Ensuring that sites are not built on open spaces that are currently well used for physical activity.</p>
Respiratory Emergency Admissions	<p>Ensure that developments do not contribute to an increase in poor air quality. Developments to include Green Streets; infrastructure to enable active travel; electric charging points and solar panels.</p>	<p>Ensure that the development of employment sites does not contribute to poor air quality. Employers to incorporate electric pool cars. Employers to promote and develop opportunities for employees to travel actively. Employment sites to incorporate sustainable energy systems.</p>
Lonely and Isolated	<p>Consideration to be given to the incorporation of community infrastructure appropriate for the age group identified as lonely and isolated.</p>	<p>Employers to consider contributing to local community activity which leads to increased levels of community cohesion and interaction for this age group.</p>

Kirklees have developed a Rapid Health Impact Assessment Planning Tool to inform how proposed site allocations could deliver health benefits by tackling

existing health issues in the vicinity of the development sites (e.g. obesity through provision of green space accessible by surrounding residential areas). The exact measures on each site are still being worked through and are linked to the site allocation approach discussed above, but are likely to be informed by a requirement for each site to produce a Health Impact Assessment as a validation requirement of planning applications. The content of the Health Impact Assessments will be informed by the Rapid Health Assessment for Planning Tool being produced by Kirklees Council and will include the following sections:

- **Section 1:** Start the Health Impact Assessment process by identifying the specific population groups and parts of the district that will be most affected by the proposal.
- **Section 2:** The next step is to provide background information on the proposal being assessed.
- **Section 3:** The final step of the process is to identify and assess the impacts of the proposal on health and wellbeing; and recommend what can be done to maximise positive and minimise negative impacts.

The aim of the Health Impact Assessment process is to make sure that new housing and employment does not increase health issues in Kirklees.

10.4.1 Process for new Provision

The planned new residential development in Kirklees may result in a requirement for new GP provision. The mechanism used to highlight whether a new facility is required would be the GP surgeries in the surrounding area highlighting capacity issues. Alternatively existing GPs might raise the issue through the Local Medical Committee. The funding for GP provision is based on the number of patients registered at the practice, called capitation funding. This weighted with more funding based on levels of deprivation and aging population. Therefore additional patients mean additional funding that can be used to provide additional GP provision and the GP surgery would make this investment in a new GP.

All the accepted development sites in the draft Local Plan would have adequate access to existing Hospital and Accident and Emergency services.

10.5 Summary of Health and Wellbeing Infrastructure

Health services in Kirklees are delivered by the North Kirklees Clinical Commissioning Group (CCG) and the Greater Huddersfield CCG. Through discussion with the CCGs and Kirklees Council public health officers it has been confirmed that both CCGs are working towards rationalisation of GP and hospital provision and new ways of working more efficiently. Health issues have been factored into site allocation processes through a Rapid Health Impact Assessment.

The planned new residential development in Kirklees may result in a requirement for new GP provision. The funding for GP provision is based on the number of patients registered at the practice, called capitation funding. This weighted with

more funding based on levels of deprivation and aging population. Therefore additional patients mean additional funding that can be used to provide additional GP provision and the GP surgery would make this investment in a new GP. The existing hospital provision is adequate to meet planned housing and employment levels. There are no funding gaps in health care provision.

The required Health and Wellbeing infrastructure delivery is set out in Table 10.1 and the Infrastructure Delivery Programme in Section 16.

Table 10.1: Summary of Health and Well Being Infrastructure (see Figure 16.1 for full details)

Ref	Scheme	Essential or Desirable	Lead delivery agency/ management organisation	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in Funding
H1	Provision of additional GP provision	Essential	GP Practices in the North Kirklees and Greater Huddersfield CCGs.	Capitation Funding (registered patient funding)	£unknown	Throughout plan period	No gap
H2	New Bradford Road Medical Centre	Essential	Greater Huddersfield CCG.	Secured NHS Capital and revenue funding	£unknown	Short term (0 – 5 years)	No gap
H3	Upgraded GP provision in Huddersfield Town Centre	Essential	Greater Huddersfield CCG.	Potential capital funding National Infrastructure Fund Revenue funding through efficiency savings.	£unknown	Short term (0 – 5 years)	Gap in funding

11 Community and Cultural

11.1 Definition and Data Sources

This section covers provision of community and cultural infrastructure.

The following sources of information have been used to populate this chapter:

- Discussion with Kirklees Council Officers responsible for libraries, museums and galleries and Council assets.

11.2 Current and Fit for Purpose

11.2.1 Overview

The district currently contains the following Council owned community buildings:

- 15 Town Halls
- 22 Community Centres and Public Halls.
- 26 Libraries
- 29 Children Centres.
- 5 Museums¹⁶

The Council owned assets equate to approximately 10% of total community buildings. There are a vast number of other community buildings, which are privately operated and provide a service to the community.

The Grade II Market Hall on Queensgate, Huddersfield requires a programme condition and maintenance works treatment equating to approximately £10 million. These schemes are identified on the Council assets 'Risk and Pressures List'.

11.2.2 Libraries

There are 26 library and information services across the Kirklees district, split broadly into what are termed 'town libraries' and 'smaller libraries'. Larger town libraries exist in:

Huddersfield	Mirfield	Heckmondwike
Dewsbury	Birstall	Holmfirth
Cleckheaton	Batley	

There are a number of known issues with the quality of the building stock for many of the smaller libraries. As part of the Council's overall asset review there has been a move to accommodate libraries within other civic buildings that may also exist, for example at Slaithwaite, where the library has been accommodated

¹⁶ NB figure excludes Castle Hill

within the Town Hall. It is already known that libraries at Huddersfield and Heckmondwike are in need of refurbishment work. Similarly, Mirfield Library is also in need of investment to maintain its fitness for purpose. Other libraries need some investment if they are to remain open.

There is a mobile bus service in the district that covers areas where there is no physical built offer. The service covers areas such as; Gomersal, Liversedge, Milnsbridge, Linthwaite and New Mill to name but a few. There is a substantial cost associated with the operation of these services and in the light of budgetary pressures there is a risk that the council may not be able to continue to support their provision. Following the release of the Cabinet Paper it will be understood whether there will be continued funding for these services and therefore whether their continued provision constitutes a funding gap.

The Council is looking to pursue asset transfer to the community in Denby Dale, Kirkburton, Skemanthorpe, Golcar, Shepley and Kirkheaton. Others may follow. If community asset transfer cannot be achieved then they could face closure as Kirklees Council may choose to no longer fund these assets.

11.2.3 Theatres and Museums

The main sites for museums, galleries and heritage homes in the Kirklees district are as follows:

Bagshaw Museum (Batley)	Batley Art Gallery	Tolson Museum (Huddersfield)
Dewsbury Museum	Castle Hill & Victoria Hill scheduled monument (Almondbury, Huddersfield)	Huddersfield Art Gallery
Red House (Cleckheaton)	Oakwell Hall (Birstall)	The Lawrence Batley Theatre (Huddersfield)

Each facility experiences a high number of visitors annually, however the true figure is likely to be higher than gate receipts might indicate owing to the fact that many sites are situated in open space, an attraction in its own right. This understandably places significant pressure on each of these cultural assets.

Kirklees Council are currently operating within an environment of public sector funding constraint. This places limits on the extent of what the authority is able to fund in terms of museum and galleries. Funding for museums and galleries has already been cut by 25%, with a further 50% cut in funding forecast from 2017 onwards. Owing to this, a forthcoming budget impact statement will suggest that 6 of the Council's sites may have to be reduced to only 3 in the coming years. This has not yet been consulted on with the public.

In light of the funding cuts that have taken place over the past few years the focus has shifted to a more commercial one with an emphasis on income generation. All sites in Kirklees are registered under the VAQUAS standard for tourism.

The more rural parts of the Kirklees district to the south are known to have a lower number of facilities than the north. Areas such as Holmfirth and Denby

Dale are noted to have a strong visitor economy and a rich heritage, with the former settlement being the location of Bamforth & Co. and the filming location for Last of the Summer Wine. Locally there is an aspiration to develop a visitor centre that builds on this heritage, however whilst the council would likely be supportive of such a move, in light of the current funding constraints it is unlikely that the Council would be able to fund such a centre.

The Tolson Museum is known to have structural issues and issues regarding access into the site. It is estimated that this will cost in the region of £1.5m to rectify.

Huddersfield Art Gallery, as an early concrete and steel framed building, is also known to have structural issues that will need to be rectified through major investment. Survey work has been conducted and cost estimates are in the region £10 million

11.3 Planned Schemes

11.3.1 Libraries

Kirklees Council are exploring a number of options in order to continue service provision in spite of a reduction in funding. This includes transfer of libraries to being community supported and reviewing the continued need for smaller libraries.

Kirklees Council have recently undertaken a library consultation considering how important the library service is in each location in the district. These findings will be incorporated into a Cabinet report.

Following the release of the Cabinet Paper it will be understood whether there will be continued funding for these services and therefore whether their continued provision constitutes a funding gap.

The following asset transfer of Skelmanthorpe Information Centre and Library to Denby Dale Parish Council had already taken place.

The Council is looking to pursue asset transfer of libraries to the community in Kirkburton, Skemanthorpe, Golcar, Shepley and Kirkheaton. Others may follow. If community asset transfer cannot be achieved then they could face closure as Kirklees Council may choose to no longer fund these assets.

11.3.2 Theatres and Museums

The Arts Council has been the source of funding for a number of investment programmes, including efforts at Oakwell Hall to the tune of £257k. Elsewhere in the district Heritage Lottery Funding has been the source of recent funding for a memorial at the Tolson Museum. As the need for future upgrades to assets are identified it is likely that these sources would be pursued to fund future work.

To support future investment and funding bids, the Council has commissioned consultants to conduct a costed masterplanning exercise at Oakwell Hall. This will

highlight future commercial opportunities for the Hall and help the Hall become more self-sustaining. It is anticipated to include improvements to car parking, signage improvements, new visitor attractions, a destination café and adventurous play facilities. It is likely that there will be highways impacts that will need to be addressed in order for the masterplan to be adopted by the council. There is currently no committed funding for the delivery of the ultimate scheme and as such there can be said to be a funding gap here. The masterplan will identify the funding gap.

Castle Hill and Victoria Tower have previously been the subject of a bid to the Heritage Lottery Fund to secure funding for the refurbishment of the tower itself. This however has been stepped back and as such the funding to facilitate refurbishment is outstanding. It is estimated that this funding gap is approximately to the order of £1.5m.

11.3.3 Community Centres

Kirklees Council are investigating potential ways of creating efficiency savings and rationalising Council operated buildings to support community and service delivery. The main focus is on transferring Council assets to Community Groups or bringing a number of facilities into one building to improve footfall and the active period of the building. The following assets transfers have already occurred:

- Soothill Community Centre to the Soothill Community Association.
- Paddock Village Hall to Paddock Community Trust.
- Golcar Community Centre to the 4th Huddersfield Golcar Scout Group.
- The Carlile Institute to Meltham Town Council to be used as a post office and Council office.

Kirklees Council are now progressing a review of all Council assets.

11.4 Impact of Development

Discussions with Kirklees Council officers has indicated that there is not deemed to be a shortage in provision of community and cultural facilities. Based on the availability of Council owned and community run / privately run assets it is considered that adequate facilities are available. It may be appropriate for the large strategic sites to provide community facilities. This would be developed through masterplan work on the Strategic Sites. The Kirklees Council asset management team are currently reviewing the level of community facilities across Kirklees to allow any future gaps to be identified. This would not be completed in time to feed into this study, but will be fed into future iterations.

Through discussion with Kirklees Council officers it was noted that it is unlikely that the proposed quantum of development across Kirklees will have a significant impact upon library provision. Although it is likely that demand will rise in some libraries should a significant number of others close, this may not necessarily translate into a large increased level of footfall owing to the rise in popularity of

e-books and e-services. Should there be an increase in the level of footfall then the Council's strategy for library provision would have to be reviewed.

11.5 Summary of Community and Cultural Infrastructure

The Kirklees Council asset management team are currently reviewing the level of community facilities across Kirklees, including options to transfer assets to community groups. This has not been completed in time to feed into this study, but will be fed into future iterations. There are a number of existing maintenance issues with community and cultural facilities, which currently do not have identified funding sources.

Discussions with Kirklees Council officers have indicated that there is not deemed to be a shortage in provision of community and cultural facilities. Based on the availability of Council owned and community run / privately run assets it is considered that adequate facilities are available. It may be appropriate for the large strategic sites to provide community facilities. This would be developed through masterplan work on the Strategic Sites. Whilst there are existing funding gaps related to maintenance of community and cultural assets there are no funding gaps in new provision required to meet the needs of new homes in the district.

The required Community and Cultural infrastructure delivery is set out in Table 11.1 and the Infrastructure Delivery Programme in Section 16.

Table 11.1: Summary of Community and Cultural Infrastructure (see Figure 16.1 for full details)

Ref	Location	Scheme	Essential / Desirable	Lead delivery agency	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding
C1	District Wide	Review of Libraries to consider all viable options	Desirable	Kirklees Council	Kirklees Council	£unknown	Short term (0 – 5 years)	No gap
C2	District Wide	Review of Community Facilities (community buildings) to consider community transfers	Desirable	Kirklees Council	Kirklees Council	£unknown	Short term (0 – 5 years)	No gap
C3	Huddersfield	The Grade II Market Hall on Queensgate requires improvements	Desirable	Kirklees Council	Kirklees Council	£10 million	Short term (0 – 5 years)	No gap
C4	Kirklees Rural	Create a visitor centre in Holmfirth to build on strong heritage of area.	Desirable	Kirklees Council	Kirklees Council	£unknown	Long term (10 – 15 years)	Gap in funding

C5	Huddersfield	Tolson Museum Structural upgrades	Desirable	Kirklees Council	Kirklees Council	£1.5m	Medium Term (5 – 10 years)	Gap in funding
C6	Huddersfield	Huddersfield Art Gallery Structural Upgrades	Desirable	Kirklees Council	Kirklees Council	£10m	Medium Term (5 – 10 years)	Gap in funding
C7	Huddersfield / Kirklees Rural	Castle Hill and Victoria Tower Refurbishment	Desirable	Potential Heritage Lottery Fund	Kirklees Council	£1.5 m	Short Term (0 – 5 years)	Gap in funding
C8	Batley and Spennings	Masterplan and future visitor strategy for Oakwell Hall.	Desirable	Kirklees Council	Private Developer Funds	£unknown	Short Term (0 – 5 years)	No gap.
C9	Batley and Spennings	Delivery of the recommendations for the Oakwell Hall Masterplan	Desirable	Kirklees Council	Heritage Lottery Funding Kirklees Council Funding	£unknown	Medium term (5 – 10 years)	Gap in Funding

12 Emergency Services

12.1 Definition and Data Sources

This section covers provision of Emergency Services infrastructure. The definition of Emergency Services includes fire, police and ambulance services covering the Kirklees district.

The following sources of information have been used to populate this chapter:

- Discussion with representatives from the West Yorkshire Fire and Rescue Service, West Yorkshire Police Service and Yorkshire Ambulance Service.

12.2 Current and Fit for Purpose

12.2.1 Fire Service

Kirklees district is currently served by the following fire stations:

- The headquarters for the West Yorkshire Fire and Rescue Service is located in Birkenshaw.
- **Huddersfield:** two fire engines with two full time fire crews and also serves as the District Headquarters.
- **Dewsbury:** two fire engines with two full time fire crews and a Specialist Response Unit e.g. dealing with chemical incidents.
- **Batley:** One fire engine with full time fire crew.
- **Slaithwaite:** one fire engine with one part time fire crew (Retained Duty System (RDS)).
- **Meltham:** one fire engine with one part time fire crew (RDS).
- **Holmfirth:** one fire engine with one part time fire crew (RDS).
- **Skelmethorpe:** one fire engine with one part time fire crew (RDS).
- **Mirfield:** one fire engine with one part time fire crew (RDS).
- **Cleckheaton:** one fire engine with full time fire crew and one fully crewed Technical Rescue Vehicle.

12.2.2 Police Service

Kirklees district is currently served by the following operating bases, including:

- Huddersfield Police Station.
- Dewsbury Police Station.
- Batley Police Station.
- Heckmondwike Police Station.

- Holmfirth Police Station (main operating base).
- Kirkburton Police Station (forward operating base – office services).
- A small office within the Slaithwaite Fire Station.

The existing police infrastructure allows the West Yorkshire Police Service to deliver their required requirements. However the eastern part of Kirklees Rural of the district is challenging to serve due the distribution of settlements and rural nature.

12.2.3 Ambulance Service

Kirklees district is currently served by the following ambulance provision:

- Huddersfield Ambulance Station and Fleet Workshop.
- Honley, Huddersfield Ambulance Station
- Dewsbury Ambulance Station and Stand by Point.

Kirklees is also served by a station in Brighouse and Penistone.

12.3 Planned Schemes

12.3.1 Fire Service

The West Yorkshire Fire and Rescue Service Integrated Risk Management Plan 1 and 2 set out proposals to reduce risk and create efficiency savings up to 2020.

This plan included the merging of Dewsbury and Batley Fire Stations to create a new fire station with two fire engines and two full time crews on Carlton Road to serve both Dewsbury and Batley. The new station will be completed in August 2015 and at this point the existing Dewsbury and Batley fire stations will close.

12.3.2 Police Service

Through discussions with West Yorkshire Police an aspiration to create a single police station serving the Batley / Spen sub area was noted. This is currently being investigated by the West Yorkshire Police and could be achieved by the whole sub area being served from one of the existing stations or a new site in the sub area.

12.3.3 Ambulance Service

In July 2015 the Ambulance Service will consult on their proposed Hub and Spoke Proposals. This is a proposal to create larger hub stations, served by a number of smaller spokes with aim of rationalising the level of building assets delivering efficiency savings through turn-around of vehicles and staff. This will include the following options for the future operation of the ambulance service:

- Do nothing.

- Refurbish the existing ambulance station stock.
- Implement the hub and spoke model in West and South Yorkshire.
- Implement the hub and spoke model in whole of Yorkshire.

The outcome of this consultation is likely to be confirmed by the mid-2016.

12.4 Impact of Development

12.4.1 Fire Service

The West Yorkshire Fire and Rescue Service are currently preparing the Integrated Risk Management Plan 3. The West Yorkshire Fire and Rescue Service are investigating options to work collaboratively with other emergency service providers.

This is considering further rationalisation and efficiency savings. Discussion with the West Yorkshire Fire Service based on the proposed level of housing and employment growth in the Local Plan have indicated that the current infrastructure will allow the fire service to serve new development.

The District Commander for Kirklees will monitor 999 calls based on:

- Response time.
- Accidental deaths and injuries.
- Trends in fire cause and location.

Based on this data a Risk Matrix is completed, which flags locations and communities at particular risk of fire related incidents and other emergency incidents. There may be a requirement to reallocate resources if parts of Kirklees are not meeting the required targets.

12.4.2 Police Service

Discussions with West Yorkshire Police Service has confirmed that they are reasonably comfortable that the proposed level of housing and employment growth can be served from existing locations. The West Yorkshire Police monitor the type and response time of calls. For example, calls to the police should attend in 15 minutes. It was noted that resources may need to be reallocated depending on police monitoring. For example further resource could be required in Kirburton to support the level of housing proposed in Kirklees Rural. West Yorkshire Police will monitor services against their targets and reallocate resource if required.

The West Yorkshire Police Service also raised that a significant amount of new student development was currently being proposed in Huddersfield Town centre, in addition to the developments that have already been completed. The police have noted that there is a policing issue here to create a community of several thousand students living and working in the town centre which may create an enhanced policing requirement.

12.4.3 Ambulance Service

Discussions with the estate agent which manages the Yorkshire Ambulance Service assets has confirmed that the existing ambulance provision would allow new development sites to be served. The delivery of the hub and spoke model would give consideration to the focus of new homes across Yorkshire. Any funding for new facilities would need to come from Department for Health (DfH) funding.

12.5 Summary of Emergency Services Infrastructure

All three emergency service operators are investigating models of working to allow them to deliver services more efficiently. The use of emergency service provision will be monitored by the fire, police and ambulance services based on their quality indicators (e.g. response times). If response times are not being met then the operators will seek to move resources to allow targets to be met. There is therefore no gap in funding for emergency service provision.

The required Emergency Service infrastructure delivery is set out in Table 13.1 and the Infrastructure Delivery Programme in Section 16.

Table 13.1: Summary of Emergency Service Infrastructure (see Figure 16.1 for full details)

Ref	Location (Scheme	Essential / Desirable	Lead delivery agency	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding
E1	Batley / Spen	A new Police Station to serve Batley / Spen Sub area	Essential	West Yorkshire Police service	West Yorkshire Police Capital Budget	£unkno wn	Medium Term (5 -10 years)	Gap
E2	District wide	Potential to relocate resources (if monitoring indicates that that this action is required)	Essential	West Yorkshire Fire and Rescue Service	Central Government Grant Business Rates Council Tax Other fees for licensing work.	£unkno wn	Medium Term (5 -10 years)	Gap
E3	District wide	Delivery of the Hub and Spoke Model (if deemed necessary)	Essential	Yorkshire Ambulance Service	Department for Health funding.	£unkno wn	Medium Term (5-10 years)	Gap

13 Open Space and Green Infrastructure

13.1 Definition and Data Sources

Kirklees Council is currently reviewing its approach to Open Space and considering a new approach to setting standards compared to the previous work undertaken to inform the Council's 2007/2010 Open Space studies. This new approach builds upon the findings of a number of emerging studies. In some cases this differing approach will significantly alter the findings of the previous studies.

The emerging studies (covering open space, playing pitches and built facilities) comprise:

- 2015 Open Space Study including; Open Space Demand Assessment;
- 2015 Playing Pitch Strategy;
- 2015 Built Leisure and Sports Facilities Strategy.

Whilst the emerging Kirklees Open Space studies will ultimately dictate the future direction of Kirklees Open Space policy through the Local Plan, it should be noted that at time of writing their respective findings have not yet received formal approval from the Council. Therefore further changes may occur ahead of Local Plan adoption. Notwithstanding these points, this study has been compiled upon the best and most up-to-date evidence available at the time of writing.

In addition to a review of secondary information, a meeting was held in late June 2015 with the Local Plan officers responsible for open space and sports provision. This built on the review of baseline information highlighted across the various studies (i.e. those set out above) and provided a useful 'check and challenge' session to determine the accuracy of the various assumptions.

The various studies each categorise open space and sports facilities into the following typologies:

- Parks and recreation grounds;
- Allotments;
- Children's Play Areas;
- Outdoor sports facilities, including; Playing Pitches (*covered in Section 14*);
- Natural / Semi-natural green space including Local Nature Reserves;
- Amenity green space
- Built facilities (*covered in Section 14*); and
- Cemeteries

As part of the Council's update Open Space study, officers have developed district wide open space standards for the district.

13.2 Existing Infrastructure and Fitness for Purpose

13.2.1 Parks & Gardens

Quantity

Due to reclassification of sites, recreation grounds are now included within the supply of parks. Information supplied to Arup by Kirklees Council indicates that the aggregated Parks and Gardens and Recreation Grounds typology stands at 219 open spaces covering some 337.35ha. Analysis from the up-dated study shows deficiencies in south Kirklees in terms of accessibility and quantity standards. Further work contained in the 2015 Demand Study specifically notes that in Huddersfield the provision of parks and nature areas are “perceived very positively with high satisfaction levels noted in terms of availability and quality”. This is also said to be true for the Kirklees Rural area.

Based upon analysis conducted by Kirklees Council, table 13.1 highlights where there are known gaps in provision for Parks and Gardens against the proposed standard of 0.8ha/1,000 population:

Table 13.1: Provision of Parks & Garden against 0.8ha/1,000 population standard.

Analysis Area	Ward	Ha/1,000 population 2013
Batley & Spen	Batley East	0.3
	Batley West	0.81
	Birstall & Birkenshaw	3.23
	Cleckheaton	0.65
	Heckmondwike	0.54
	Liversedge & Gomersal	1.01
	Area Total:	1.06
Dewsbury & Mirfield	Dewsbury East	1.00
	Dewsbury South	0.90
	Dewsbury West	0.79
	Mirfield	0.45
	Area Total:	0.78
Huddersfield	Almondbury	0.64
	Ashbrow	0.45
	Crosland Moor & Netherton	1.15
	Dalton	0.98
	Greenhead	0.88
	Lindley	1.11
	Newsome	0.35
	Area Total:	0.79

Kirklees Rural	Colne Valley	0.31
	Denby Dale	0.50
	Golcar	0.33
	Home Valley North	0.69
	Holme Valley South	0.72
	Kirkburton	0.50
	Area Total:	0.51
Ward	Ha/1,000 population 2013	

Source: Kirklees Council analysis (August 2015)

In general terms it can therefore be observed that the main deficiencies in provision for parks and recreation grounds are found in the Kirklees Rural area and the Huddersfield area, with both Dewsbury & Mirfield and Batley & Spenningsdale exceeding the benchmark standard.

Quality

The Kirklees district currently records five parks that have achieved Green Flag standard. These are: Beaumont Park; Crow Nest Park; Wilton Park; Greenhead Park; and Oakwell Hall Country Park. Elsewhere in the district, the 2010 Open Space Study notes that over 50% of sites are either low or medium quality with the average quality score for parks and gardens falling below the high quality threshold.

In the current climate of local government spending restraint it was noted during officer discussions that there will be cut backs to the maintenance and management of some sites within the district. Park sites will be maintained to a gold / silver / bronze standard where main parks will achieve 'gold standard'. It is likely these sites will be the one achieving Green Flag status (i.e. those of the highest quality).

The 2015 Demand Assessment undertaken on behalf of Kirklees Council identifies that in the Batley and Spenningsdale area the quantity of provision for parks is perceived very positively with high satisfaction levels noted in terms of availability and quality. Despite this however, the study also made the observation that the level of satisfaction for availability and quality is not as high as it is in the other District Committee areas, meaning that there is a notable issue with the quality of parks and gardens in this area.

Accessibility

Analysis by Kirklees Council shows that with the exception of some small areas to the west of the district ('Kirklees Rural'), all areas within the Kirklees administrative boundary fall within a 30 minute drive catchment of a major park. When assessed against a walking distance of 720m, the Huddersfield and Batley and Spenningsdale areas are notably well served in terms of accessibility to parks. The Dewsbury and Mirfield area contains pockets of good accessibility (east of Mirfield), however to areas the north and north west of Mirfield are noticeably more scarce in terms of provision.

13.2.2 Allotments

Quantity

Information supplied to Arup by Kirklees Council indicates that there are 138 allotment sites in the Kirklees district, covering 76.42ha. The majority of these sites are under Kirklees Council ownership¹⁷. Kirklees Council is currently proposing a standard of 0.5ha of allotments per 1,000 households across the district. Analysis conducted in-house is reproduced in table 13.2 and shows wards where current provision falls short of the benchmark standard (highlighted in red) and wards where current provision is above the benchmark standard (highlighted in green):

Table 13.2: Provision of allotments against 0.5ha/1,000 population standard.

Analysis Area	Ward	Ha/1,000 population 2013
Batley & Spen	Batley East	0.13
	Batley West	0.10
	Birstall & Birkenshaw	0.22
	Cleckheaton	0.12
	Heckmondwike	0.39
	Liversedge & Gomersal	0.09
	Area Total:	0.17
Dewsbury & Mirfield	Dewsbury East	0.19
	Dewsbury South	0.67
	Dewsbury West	1.13
	Mirfield	0.37
	Area Total:	0.56
Huddersfield	Almondbury	0.69
	Ashbrow	0.57
	Crosland Moor & Netherton	0.79
	Dalton	0.35
	Greenhead	0.87
	Lindley	0.68
	Newsome	0.78
	Area Total:	0.68
Kirklees Rural	Colne Valley	0.54
	Denby Dale	0.31
	Golcar	0.09
	Home Valley North	0.21

¹⁷ 2010 Kirklees Council Open Space Study

	Holme Valley South	0.16
	Kirkburton	0.53
	Area Total:	0.30

Source: Kirklees Council analysis (August 2015)

The analysis contained within table 13.2 shows that the area around Dewsbury (south and west) is well served and broadly speaking records few gaps in provision. By contrast however, the area to the south of the district and particularly within Kirklees Rural can be considered to be largely underprovided for. This is compounded by allotment waiting lists which show relatively high levels of demand for allotments district-wide. The waiting lists are reproduced in table 13.3 below:

Table 13.3: Council allotments waiting list by district area committee¹⁸

District Committee Area	Council Allotments	
	Sites with waiting list	Numbers on waiting lists
Batley & Spen	13	321
Dewsbury & Mirfield	4	44
Huddersfield	45	191
Kirklees Rural	20	332

From this table it can be observed that there is a particularly high level of demand against the existing supply across Batley and Spen and Kirklees Rural. Officer discussions in June 2015 further reinforced this, noting that Kirklees Rural area is particularly undeserved by allotments in comparison to its waiting list.

Specific areas highlighted by the 2015 demand study as having a high demand for allotment provision are Lindley and Greenhead areas in Huddersfield, and Colne Valley and Holme Valley in Kirklees Rural.

Quality

The 2015 Open Space Demand Assessment is relatively silent on allotment quality, suggesting that a large amount of survey respondents did not give an opinion on allotment quality. Previous studies had suggested that there were significant issues to overcome in terms of allotment quality. Further investigation will be required to determine whether allotment quality remains the issue that it has been previously.

Accessibility

Analysis by Kirklees Council shows that allotment provision is best around the greater Huddersfield area with a good level of accessibility in these areas. Provision is however noticeably more scarce in the Batley and Spen area, with large areas around Cleckheaton, Liversedge and Heckmondwike falling beyond the proposed accessibility standards. Similarly in the Kirklees Rural area accessibility is somewhat limited, though Marsden and Meltham are notable exceptions. Accessibility around Dewsbury and Mirfield shows that there are a

¹⁸ Reproduced from 2015 Kirklees Council Open Space Assessment

number of parts within this Committee Area where allotment provision is relatively scarce.

13.2.3 Children's Play Areas

Quantity

In terms of current provision there is a relatively good coverage of play areas across the full Kirklees district. Information supplied by Kirklees Council to Arup suggests that there are 401 sites in total across the district, covering 22.52ha. Kirklees Council has confirmed that there is no quantity standard for play areas, however in the towns and villages as a minimum, 'through-age' play opportunities (0-16) should be available within a 15 minute walk 720 metres from home.

Recent work assessing demand conducted as part of the 2015 Demand Assessment highlights that in particular the Kirklees Rural area lacks play provision that caters for older children and teenagers in particular. This is said to particularly affect the Holmfirth area.

Quality

The 2015 Open Space Demand Assessment reinforces the findings of earlier studies which highlight that there are a number of vandalism and anti-social behaviour related issues at several sites within the district.

Accessibility

Analysis of children's play provision¹⁹ conducted by Kirklees Council, based upon on 15 minutes' walk (720 metres) and 2km from youth facilities (MUGAs & major skate parks), highlights that the Greater Huddersfield Area is well provided for. This is also true of the other main built up areas in Batley and Spennings Dale and Dewsbury and Mirfield. There are notable accessibility deficits in the more rural areas to the south (Kirklees Rural) and to the west of Greater Huddersfield, spreading out into Kirklees Rural. In terms of multi-use games areas where the catchment rises to 2km, the Batley and Spennings Dale, Huddersfield, Dewsbury and Mirfield areas are well served. Skate park provision is much scarcer, with good provision recorded to the south of the Greater Huddersfield area, and Batley and Spennings Dale Areas. There are some sites in settlements within the Kirklees Rural Area, though generally provision is much scarcer.

13.2.4 Natural/Semi Natural

Information provided by Kirklees Council to Arup suggests that there are 400 open spaces covering 863.8ha. Table 13.4 (below) sets out the results of a districtwide audit of natural/semi natural Open Space against the proposed standard of 2ha/1,000 population.

¹⁹ Children's playgrounds, skateboard parks, basketball/goal/hanging out area/teenage shelter

Table 13.4: Provision of natural/semi natural open space against 2.0ha/1,000 population standard.

Analysis Area	Ward	Ha/1,000 population 2013
Batley & Spen	Batley East	0.39
	Batley West	1.69
	Birstall & Birkenshaw	0.60
	Cleckheaton	2.87
	Heckmondwike	0.72
	Liversedge & Gomersal	0.16
	Area Total:	1.06
Dewsbury & Mirfield	Dewsbury East	0.74
	Dewsbury South	0.58
	Dewsbury West	4.16
	Mirfield	0.37
	Area Total:	1.50
Huddersfield	Almondbury	2.12
	Ashbrow	6.11
	Crosland Moor & Netherton	0.37
	Dalton	5.38
	Greenhead	1.22
	Lindley	1.74
	Newsome	4.56
	Area Total:	3.06
Kirklees Rural	Colne Valley	1.40
	Denby Dale	7.20
	Golcar	0.80
	Home Valley North	0.78
	Holme Valley South	1.50
	Kirkburton	0.95
	Area Total:	2.06

Source: Kirklees Council analysis (August 2015)

The analysis contained within Table 13.4 highlights deficiencies in provision in the Dewsbury & Mirfield and Batley & Spen committee areas, whilst surpluses are recorded within the Huddersfield and Kirklees Rural areas.

Quality

It is noted within the 2015 Open Space Demand Assessment that the Batley and Spen area has a lower percentage of satisfaction regarding the quality of natural open spaces than across the other areas of the district.

The study also notes that provision of natural open space in both the Huddersfield and Dewsbury and Mirfield areas is perceived to be of high quality and well received.

Accessibility

Analysis conducted by Kirklees Council highlights that large areas around the district's eastern administrative boundary ('Kirklees Rural') fall within a 2km major catchment of natural/semi natural green space. At the minor catchment level, the Greater Huddersfield area is well served by natural and semi natural green space. This is similar to the Batley and Spen area which is shown to be well served both at the major catchment level ('2km') and the minor catchment level ('720m'). The Dewsbury area within Dewsbury and Mirfield Committee area is well served, however the provision around Mirfield is perhaps scarcer than in other committee areas.

13.2.5 Amenity green space

Quantity

The total supply of amenity green space in Kirklees is 117.03 hectares over 290 open spaces. The district fares relatively well against the 0.3ha/1,000 population standard, with two of the district's four area committee areas slightly above the standard, and the Huddersfield area falling only fractionally short of the standard. The most notable deficiency is in the Kirklees Rural Committee Area, a finding that was reinforced through discussions with Kirklees Council Officers in summer 2015. The district-wide analysis is reproduced in table 13.5 below.

Table 13.5: Provision of amenity open space against 0.3ha/1,000 population standard.

Analysis Area	Ward	Ha/1,000 population 2013
Batley & Spen	Batley East	0.36
	Batley West	0.26
	Birstall & Birkenshaw	0.79
	Cleckheaton	0.09
	Heckmondwike	0.39
	Liversedge & Gomersal	0.33
	Area Total:	0.36
Dewsbury & Mirfield	Dewsbury East	0.58
	Dewsbury South	0.23

	Dewsbury West	0.27
	Mirfield	0.33
	Area Total:	0.35
Huddersfield	Almondbury	0.18
	Ashbrow	0.33
	Crosland Moor & Netherton	0.22
	Dalton	0.28
	Greenhead	0.12
	Lindley	0.20
	Newsome	0.36
	Area Total:	0.24
Kirklees Rural	Colne Valley	0.24
	Denby Dale	0.50
	Golcar	0.15
	Home Valley North	0.01
	Holme Valley South	0.05
	Kirkburton	0.41
	Area Total:	0.16

Source: Kirklees Council analysis (August 2015)

As demonstrated in the table above, despite two committee areas being slightly above the standard, those areas that do meet the proposed standard, Dewsbury & Mirfield and Batley & Spen committee areas, are noted to do so only fractionally. On the whole there will be a need to address provision of amenity green space in the Kirklees Rural and Huddersfield Area where there is currently an identified gap in provision, and as the district grows there will be a continued need to provide more green space in order to ensure that some areas currently above the standard do not fall into 'deficiency'. This will however be ensured through Local Plan policy and does thus does not constitute a deficit.

Quality

It is suggested in the 2015 Demand Study that there is demand in the district to improve the multi-functionality of the amenity spaces by including children's play provision or seating. This, it suggests, would increase the usage of such spaces and also potentially reduce levels of anti-social behaviour such as motorbike riding for example.

Accessibility

Analysis conducted by Kirklees Council shows that the southern part of the Greater Huddersfield area together with the Batley area are well provided for in terms of accessibility to amenity green space. The Mirfield area also records good accessibility levels. Amenity green space is scarcer to the north of Huddersfield

and the settlements within the Kirklees Rural committee area are noticeably scarce.

13.2.6 Cemeteries

Quantity

The 2015 Kirklees Council Open Space Demand Assessment notes that there is identified spare capacity at several cemetery sites including Batley, Dewsbury, Heckmondwike, Cleckheaton, Skelmanthorpe and Hey Lane Cemetery at Almondbury. The study notes that Hey Lane Cemetery, being a relatively new site, has approximately 15-20 years burial provision remaining, whilst Batley has ten years. In the long term however it is likely that there would be a need for an additional burial site to serve the south of Kirklees, however no potential sites have been identified. There is a Kirklees Council preference for a site towards the Huddersfield area.

Despite new provision at Castle Hill Cemetery, Hey Lane, Almondbury (a recent investment) there are shortages in many other parts of the Kirklees district. Expansion of many existing cemeteries is proposed.

Table 13.7 highlights where there are gaps in provision within the district. Cemeteries at Cleckheaton, Earlsheaton, Almondbury, Edgerton and Kirkheaton are all closed to burials, whilst cemeteries at Slathwaite and Lockwood each have less than 5 years' worth of capacity. Broadly this translates into a need for additional provision in the Kirklees Rural area, specifically towards the south of the district, the south Huddersfield area and the Batley and Spen area. It should however be noted that Batley cemetery has been identified for expansion.

Table 13.7: Council Cemetery Provision²⁰

Cemetery	Approximate remaining plots	Approximate years remaining
Batley Cemetery	580	10
Cleckheaton (New) Cemetery	500	63
Cleckheaton (Old) Cemetery	Closed to new burials	
Dewsbury Cemetery	2000	48
Earlsheaton Cemetery	Closed to new burials	
Heckmondwike Cemetery	900	113
Liversedge Cemetery	800	45
Almondbury Cemetery	Closed to new burials	
Edgerton Cemetery	Closed to new burials	
Hey Lane Cemetery	1100	17
Kirkheaton Cemetery	Closed to new burials	
Lockwood Cemetery	12	<1

²⁰ Reproduced from 2015 Kirklees Council Open Space Demand Assessment

Skelmanthorpe Cemetery	175	27
Slathwaite Cemetery	23	3

Quality

The 2015 Demand Assessment suggests that the perception of quality across the district's cemetery provision is generally positive. Despite this, provision in Heckmondwike and Cleckheaton are suggested to be in a poor condition and in need of some improvement.

Accessibility

There are no accessibility standards for cemeteries within the district.

13.3 Planned Schemes

The Dewsbury Country Park is a new woodland that has so far secured funding to increase its quality (planting etc.). The park was one of White Rose Forest's key projects and Diamond Jubilee woodlands. As a new park there may be a requirement to generate further funding to enable its continued development.

A new country park is currently being promoted around Farnley Tyas and surrounding area by Farnley Estates. It is proposed to be open to the public offering a range of potential activities. The boundary of the proposed country park has been submitted to be included as strategic green infrastructure in the Local Plan. If delivered, it is likely that this scheme would be delivered in the medium to long term.

13.4 Impact of Proposed Development

13.4.1 Overview

The following sections contain Tables 13.8 to 13.11 that summarise the deficit in open space by each study area and by specific open space typology. This is therefore considered to form the 'baseline scenario'. From these tables it can be observed that further growth across the district would likely increase the pressure on the existing stock of open space, and where deficits in provision exist (both in quantity and accessibility), these will be further exaggerated by the proposed quantum of growth. Similarly where quality issues have been observed, the impact of an increase in population within the district, and therefore an increase in the number of population using each site, will only further reduce existing levels of quality.

It would be expected that the planned growth across the Kirklees Council district should contribute towards rectifying the deficit in specific typologies through on-site provision where possible, in line with Kirklees Council Local Plan policy. It is likely that the larger strategic sites will include on-site provision. Further provision of open space sites on allocated development sites (especially strategic sites) will also go some way toward rectifying accessibility issues by introducing new sites into the overall stock.

In terms of quality Kirklees Council may wish to utilise planning obligations or the use of the Community Infrastructure Levy to improve the quality of existing sites where possible. These obligations may be tied to sites proposed for allocation in the Kirklees Council Local Plan, and therefore may provide one such mechanism to improve the quality of the stock of existing sites.

13.4.2 Huddersfield

Based on data and analysis provided by Kirklees Council it is noted that there are the following gaps in provision:

Table 13.8: Summary of open space deficits across the Huddersfield area

Typology	Area
Parks & Gardens	Deficits recorded in Almondbury, Ashbrow and Newsome wards
Allotments	Deficit recorded in Dalton ward
Children's Play Areas	The area is well served in terms of accessibility (note: no set standard for quantity)
Natural/Semi Natural	Deficits recorded in Crosland Moor and Netherton, Greenhead and Lindley wards
Amenity Green Space	Deficits recorded in Almondbury, Crosland Moor & Netherton, Dalton, Greenhead, Lindley and Newsome wards

As described in section 13.4.1, this should be utilised to influence new provision within the district in line with Kirklees Council Local Plan policy.

13.4.3 Dewsbury and Mirfield

Based on data and analysis provided by Kirklees Council it is noted that there are the following gaps in provision:

Table 13.9: Summary of open space deficits across the Dewsbury and Mirfield area

Typology	Area
Parks & Gardens	Deficits recorded in West and Mirfield wards
Allotments	Deficits recorded in Dewsbury East and Mirfield wards
Children's Play Areas	The area is well served in terms of accessibility (note: no set standard for quantity)
Natural/Semi Natural	Deficits recorded in Dewsbury East, Dewsbury South and Mirfield wards
Amenity Green Space	Deficits recorded in Dewsbury South and Dewsbury West wards

As described in section 13.4.1, this should be utilised to influence new provision within the district in line with Kirklees Council Local Plan policy.

13.4.4 Batley and Spen

Based on data and analysis provided by Kirklees Council it is noted that there are the following gaps in provision:

Table 13.10: Summary of open space deficits across the Batley & Spen area

Typology	Area
Parks & Gardens	Deficits recorded in Batley East, Cleckheaton, and Heckmondwike wards
Allotments	Deficits recorded across all wards
Children's Play Areas	The area is well served in terms of accessibility (note: no set standard for quantity)
Natural/Semi Natural	Deficits recorded in Batley East, Batley West, Bristall & Birkenshaw, Heckmondwike and Liversedge & Gomersall wards
Amenity Green Space	Deficits recorded in Batley West and Cleckheaton wards

As described in section 13.4.1, this should be utilised to influence new provision within the district in line with Kirklees Council Local Plan policy.

13.4.5 Kirklees Rural

Based on data and analysis provided by Kirklees Council it is noted that there are the following gaps in provision:

Table 13.11: Summary of open space deficits across the Batley & Spen area

Typology	Area
Parks & Gardens	Deficits recorded in Colne Valley, Golcar, Home Valley North, Home Valley South and Kirkburton wards
Allotments	Deficits recorded in Denby Dale, Golcar, Home Valley North and Home Valley South wards
Children's Play Areas	Deficiencies in accessibility around many of the settlements in the Kirklees Rural Area (note: no set standard for quantity)
Natural/Semi Natural	Deficits recorded in Colne Valley, Golcar, Home Valley North and Home Valley South wards.
Amenity Green Space	Deficits recorded in Colne Valley, Denby Dale, Golcar, Home Valley North, and Home Valley South wards

As described in section 13.4.1, this should be utilised to influence new provision within the district in line with Kirklees Council Local Plan policy.

13.5 Summary of Open Space and Green Infrastructure

Assessment of open space is broadly broken down into the three areas of quantity, quality and accessibility. The provision of open space against these three assessment areas varies considerably across the Kirklees Council district. There are some areas that score poorly against these individual criteria, however the proposed quantum of growth set out in the Kirklees Council Local Plan will potentially provide a mechanism by which Kirklees Council can begin to rectify these deficits.

The required Open Space and Green Infrastructure delivery is set out in Table 13.12 and the Infrastructure Delivery Programme in Section 16.

Table 13.12: Summary of Open Space and Green Infrastructure (see Figure 16.1 for full details)

Ref	Location	Scheme	Essential / Desirable	Lead delivery agency	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding
G1	Dewsbury & Mirfield	Expansion of Dewsbury Country Park	Desirable	Kirklees Council	Community Infrastructure Levy; Section 106	£unknown	Medium Term (5-10 years)	Gap
G2	Huddersfield / Kirklees Rural	Proposal to create a Country park at Farnley Tyas	Desirable	Private Developer	Private Developer Funds	£unknown	Medium Term (5 – 10 years)	No gap.
G3	District Wide	Completion of Open Space Standards	Essential	Kirklees Council	Kirklees Council	£unknown	Short Term (0-5 years)	No Gap
G4	District Wide	Provision of new open space to rectify identified deficits	Essential	Kirklees Council	Community Infrastructure Levy; Section 106	£unknown	Continual delivery throughout plan period	Potential Gap
G5	District Wide	Measures to improve quality of open space	Essential	Kirklees Council	Community Infrastructure Levy; Section 106	£unknown	Continual delivery throughout plan period	Potential Gap

14 Sports, Leisure and Recreation

14.1 Definition and Data Sources

The background evidence base for open space and sports provision broadly comprises:

- The 2014 Built Leisure and Sports Facilities Strategy; and
- The emerging Playing Pitch Strategy (2015);

In addition to a review of secondary information, a meeting was held in late June 2015 with the Local Plan officers responsible for open space and sports provision. This built on the review of baseline information highlighted across the various studies (i.e. those set out above) and provided a useful ‘check and challenge’ session to determine the accuracy of the various assumptions.

14.2 Existing Infrastructure and Fitness for Purpose

Playing Pitches

Kirklees Council’s emerging playing pitch strategy highlights that there are significant shortfalls in provision across the whole district. The types of pitches included within the Playing Pitch Strategy are:

- Football pitches;
- Cricket pitches;
- Rugby League pitches;
- Rugby Union pitches;
- Artificial grass pitches (AGPs);
- Bowling greens; and
- Tennis courts.

There is a considerable issue of ‘over-playing’ on sports pitches particularly, with football, rugby union and rugby league pitches especially prone to overplaying. For football the district falls well short of the FA’s standard for 3G pitches.

The following table is reproduced from the May 2015 Playing Pitch Strategy and sets out the quantitative findings in terms of provision:

Table 14.1: May 2015 Playing Pitch Strategy quantitative findings in terms of provision

Sport	Analysis Area	Current picture	Future demand (2037)
Football (grass pitches)	Batley & Spen	Shortfall of adult, youth 11v11 and 9v9 match equivalent sessions.	Shortfall of adult, youth 11v11 and 9v9 match equivalent sessions.
	Dewsbury & Mirfield	Shortfall of youth 11v11 and 9v9 match equivalent sessions.	Shortfall of youth 11v11 and 9v9 match equivalent sessions.
	Huddersfield	Shortfall of youth 11v11 and 9v9 match equivalent sessions.	Shortfall of youth 11v11 and 9v9 match equivalent sessions.
	Rural East	Shortfall of youth 9v9 and 7v7 match equivalent sessions.	Shortfall of youth 9v9 and 7v7 match equivalent sessions.
	Rural West	Shortfall of adult, youth 11v11 and 9v9 match equivalent sessions.	Shortfall of adult, youth 11v11 and 9v9 match equivalent sessions.
Football (3G AGPs)	Batley & Spen	Shortfall of 2 3G pitches based on FA model.	Pitch/s will require resurface.
	Dewsbury & Mirfield	Shortfall of 1 3G pitch based on FA model.	Pitch/s will require resurface.
	Huddersfield	Shortfall of 2 3G pitch based on FA model.	Pitch/s will require resurface.
	Rural East	Shortfall of 2 3G pitch based on FA model.	Pitch/s will require resurface.
	Rural West	Shortfall of 2 3G pitch based on FA model.	Pitch/s will require resurface.
Cricket	Batley & Spen	Shortfall of matches per season	
	Dewsbury & Mirfield	Shortfall of matches per season	
	Huddersfield	Significant shortfall of matches per season	
	Rural East	Shortfall of matches per season	
	Rural West	Significant shortfall of matches per season	
Rugby Union	Batley & Spen	Shortfall of match equivalent sessions	Will if clubs grow as predicted.
	Dewsbury & Mirfield	No current demand for pitches	No demand expected.

Sport	Analysis Area	Current picture	Future demand (2037)
	Huddersfield	Shortfall of match equivalent sessions	Likely to increase if clubs grow as predicted.
	Rural East	No current demand for pitches	No demand expected.
	Rural West	No current demand for pitches	No demand expected.
Rugby League	Batley & Spennethorpe	Shortfall of senior, junior and primary match equivalent sessions	
	Dewsbury & Mirfield	Shortfall of senior, junior and primary match equivalent sessions	
	Huddersfield	Shortfall of senior match equivalent sessions	
	Rural East	Shortfall of senior match equivalent sessions	
	Rural West	Shortfall of senior and junior match equivalent sessions	
Hockey (Sand AGPs)	Batley & Spennethorpe	Current demand being met.	Pitch/s will likely require resurfacing.
	Dewsbury & Mirfield	No current demand for pitches	No demand expected.
	Huddersfield	Current demand being met.	Pitch/s will likely require resurfacing.
	Rural East	Unmet demand from Storthes hall conversion	Pitch/s will likely require resurfacing.
	Rural West	No current demand for pitches	No demand expected.

Built Facilities

There are 14 sports centres and swimming pools in Kirklees, which are spread across the district. The sports centres and swimming pools are generally of a good quality and are operated by Kirklees Active Leisure ('KAL'). KAL is wholly independent of Kirklees Council and operates a cross-subsidy model whereby profit making leisure centres part subsidise other centres that are not recording a profit. It has been confirmed by Kirklees Council that there are no further plans for asset transfer from Kirklees Council to KAL.

The Leisure and Built Facilities Strategy highlights that the provision of swimming pools is generally adequate across the district. However the study does recommend an increase in 'water-space'²¹ to cater for new growth. The study does not however state where this should be located within the district. It is likely

²¹ Note additional water space does not necessarily equate to provision of a new facility.

however that key locations of population growth will highlight where the additional need will be required.

The only asset where there are on-going quality issues at the Spenborough Swimming Pool. This is a 1960s swimming pool. Kirklees Council estimate that a capital allowance of £10m²² is required to rebuild the swimming pool.

There is a large demand for gymnastics facilities in Kirklees and the Built Facilities Study recommends a dedicated facility for gymnastics. There are currently no plans however to rectify this.

The Kirklees Council Built Facilities Study suggests that the supply of golf courses within the district exceeds demand.

14.3 Planned Schemes

Discussions with Kirklees Council officers in summer 2015 confirmed that KAL currently has no further planned improvements to its leisure centres or swimming pools.

A Green Belt site adjacent to the Dewsbury Rams site at Owl Lane has recently received permission and is expected to deliver new sports facilities and open space. This will be fully developer funded and as such there is no funding gap for this scheme.

14.4 Impact of Proposed Development

As set out in the previous sections, the 2015 Playing Pitch Strategy suggests that there is a district-wide shortage of playing pitch provision with much of the existing stock suffering from overplay. This therefore represents both a quantity and quality provision gap as the shortage in quantity directly gives rise to quality issues. An increase in the level of population within the district could potentially worsen the existing baseline scenario should new facilities not be delivered, or if qualitative improvements are not made to accommodate a potential rise in the number of participants in sport.

As with wider open space typologies within Kirklees, Kirklees Council has not yet adopted specific standards against which the adequate provision of playing pitches and built facilities can be judged. This means that it is difficult to say definitively whether or not potential shortages in provision will be compounded by future development as proposed within the Local Plan.

Consideration of the appropriate level of provision by area is made more complicated by the fact that sporting participants often do not choose their sporting club (and thus venue) based solely on the proximity of their home to a facility. This is reflected in the guidance provided by many sport national governing bodies to local authorities on setting provision standards. Additionally club and area based issues such as team generation rates will mean that certain

²² Figure as advised by Kirklees Council Asset Strategy Officers

areas within the district have a greater need for facilities than others. It is therefore difficult to understand exact gaps on an area by area basis.

What is clear however, is that there are numerous district-wide quality issues across the stock of playing facilities in Kirklees. The Playing Pitch Strategy highlights where these issues arise on a site specific basis and includes recommendations to alleviate issues. The majority of these proposals do not have committed funding streams and as such constitute a gap in infrastructure provision.

Notwithstanding the issues set out above, it is clear that district-wide growth will translate into an increase in demand for facilities. If this demand is not met by a sufficient increase in supply (either through new facilities or by better management and use of the existing stock), then this will result in a widening gap in provision of sports infrastructure.

In terms of swimming pools it is noted that there is a need for additional ‘water space’ within the district. However this may be accommodated through revised management arrangements rather than through the delivery of a new purpose built facility. Further work is required to be undertaken by Kirklees Council in order to determine whether or not revised management arrangements of swimming pools will provide the necessary capacity, or whether a new facility is in fact required.

14.5 Summary of Sports, Leisure and Recreation

In terms of sports, leisure and recreation the district experiences a shortage of provision in terms of quantity, with several facilities suffering from overplaying. This could be rectified through the delivery of new facilities or in part through a different approach to management on a site by site basis. There are numerous quality issues noted at various sites across the full extent of the district.

The required sports, leisure and recreation delivery is set out in Table 14.2 and the Infrastructure Delivery Programme in Section 16.

Table 14.2: Summary of Sports, Leisure and Recreation Infrastructure (see Figure 16.1 for full details)

Ref	Location	Scheme	Essential / Desirable	Lead delivery agency	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding
S1	District Wide	Measures to implement recommendations of Playing Pitch Strategy	Essential	Kirklees Council	Community Infrastructure Levy; Section 106 Sports England	£unknown	Continual delivery throughout plan period	Gap in funding
S2	Dewsbury & Mirfield	New sports facilities adjacent to Dewsbury Rams site	Essential	Private developer	Private Developer Funds	£unknown	Short Term (0-5 years)	No Gap

15 Strategic Sites

15.1.1 Summary of Sites

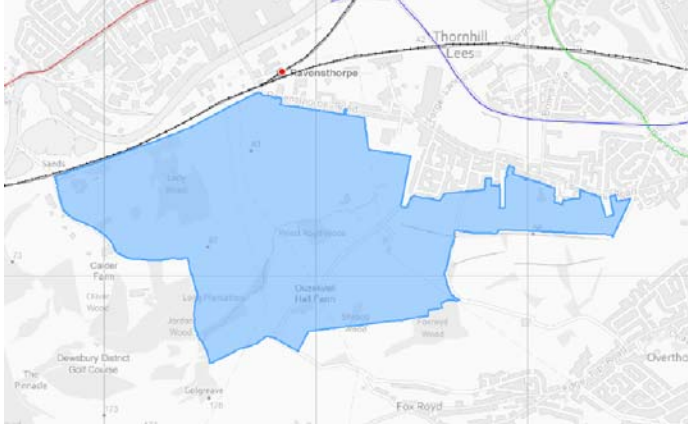
This section provides a detailed appraisal of the infrastructure issues on the proposed strategic site allocations. The identified sites were agreed with Kirklees Council at the inception meeting for this commission.

Table 15.1. Provides a summary of the strategic site allocations. The infrastructure issues are then set out by site from section 13.2 onwards. It is noted that the quantum's of employment and housing development have changed since detailed utility analysis was carried out by Arup. It is recognised that further analysis in relation to the impact of any increases in development quantum's will be required to provide the evidence base for the into the next draft of the Local Plan. This is particularly apparent for Land at Cooper Bridge, as there has been a substantial increase in the quantum of development at this location, since the utility chapter of the IDP was produced.

Table 15.1: Summary of Proposed Strategic Site Allocations

	Capacity assessed in IDP	Draft Local Plan, November 2015
Residential Sites	Number of Dwellings	
Land south of Ravensthorpe Road, Thornhill Lees, Dewsbury	2500 dwellings	2,310 dwellings in plan period (1,690 beyond the plan period).
Land north of Bradley Road, Bradley, Huddersfield	1974 dwellings	1,680 dwellings in plan period (294 beyond the plan period).
Mixed use Sites	Number of Dwellings and Total Floor Space sqm	
Land East of Leeds Road, Shaw Cross, Dewsbury	1000 dwellings	1,535 dwellings and 122,500 sqm of employment
Land north of Blackmoorfoot Road, Crosland Moor, Huddersfield	435 dwellings	438 dwellings and 51.170 sqm of employment.
Employment Sites	Total Floor space sqm	
Land at Cooper Bridge	21,403 sqm	161,185 sqm
Land Off A58 Whitehall Road, Cleckheaton	78,874 sqm	41,020 sqm
Former North Bierley Waste Water Treatment Works, Cliff Hollins Lane, Cleckheaton	80,697 sqm	49,000 sqm
Land at Wakefield Road and Kiln Lane, Clayton West, Huddersfield	90,845 sqm	55,196 sqm

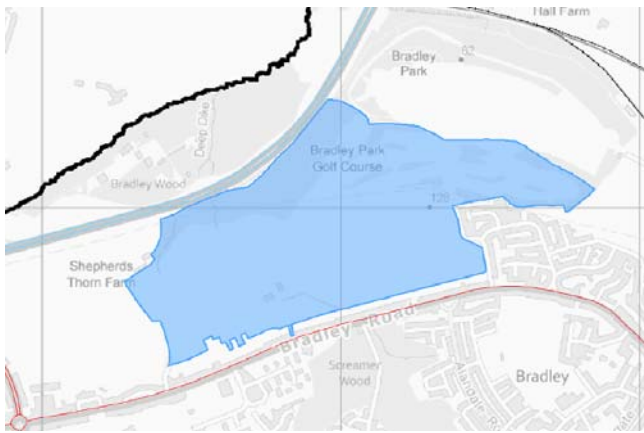
15.2 Land south of Ravensthorpe Road, Thornhill Lees, Dewsbury Strategic Site

Site Name and Reference	Site Capacity and Proposed Use
Land south of Ravensthorpe Road, Thornhill Lees, Dewsbury Strategic Site	Residential, 2310 units in plan period (1690 units beyond the plan period) 
Current land use	Agricultural fields
Known abnormal of development issues	Masterplanning work is on-going to establish any further site abnormalities and mitigation.
Transport Issues and Requirements	The site is located to the south of Ravensthorpe/Lees Hall Road which connects to the A644 (via Calder Road) to the north west. There are a number of locations where access could potentially be taken from, however it is most likely that it will be taken from Ravensthorpe Road. The site is in close proximity to Ravensthorpe railway station providing onwards services towards Leeds and Manchester. Further modelling work is currently being undertaken by Aecom and will support the draft Local Plan consultation in late 2015.
Utility Provision ²³	The projected maximum electricity demand at the South Dewsbury site is 4.5 MW. The closest NPG Substation to the South Dewsbury Strategic Site is Thornhill. The primary substation has sufficient capacity to sustain the proposed growth at the site with a projected available capacity of 18.63 MVA in 2018/2019. There are no capacity issues related to gas or water supply or treatment affecting this strategic site.
Telecommunications	Scale of development and proximity to Mirfield exchange should explore option for FTTP services and / or Virgin Media
Flood Risk and Drainage issues	This site falls in Flood Risk Zone 1. There is therefore no risk of flooding from fluvial sources. Open and culverted watercourses cross the site providing potential for surface water flooding. These watercourses are the responsibility of Kirklees Council. There have been past incidents of surface water flooding along Ravensthorpe Road.

²³ Utility capacity analysis is based on level of development set out in the 'capacity assessed in IDP' column of Table 15.1. The development quantum for this site has reduced slightly in the plan period compared to the level assessed in the IDP.

	The Councils drainage team note that the site would benefit from a drainage masterplan.
Open Space and Sports requirements	The nearest Open Space to the site is Holroyd Park in Ravensthorpe. It is likely that Kirklees Council would seek on-site provision of open-space and would direct the developer towards a typology that records a deficiency.
Education requirement	<p>If a residential use was developed on this site, education requirements would apply.</p> <p>Primary Provision: The closest primary school is Ravensthorpe School, located immediately adjacent to the proposed site. It is unknown whether this school has additional capacity, however contribution towards primary school places would be required depending on the school's capacity at the point of planning application and the type of residential development.</p> <p>Secondary Provision: The nearest school is the Manorcroft Academy. Further work is required by Kirklees Council to understand the impact of this allocation. Should there be insufficient capacity here then a contribution will be required at the point of planning application based on the number of places required above the existing capacity.</p>
Health provision	There are 2 GP surgeries in Ravensthorpe and both are currently shown as accepting new patients. Both surgeries are within walking distance of the site. As discussed in the health provision chapter if additional GP provision is required the existing GP surgeries have the ability to increase their GP capacity. The most appropriate solution will depend on the size of the proposed population. The nearest hospital is the Dewsbury and District hospital.

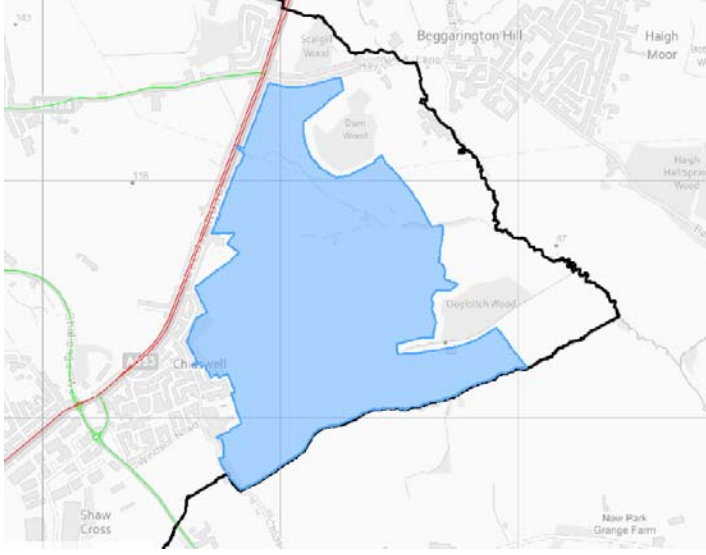
15.3 Land north of Bradley Road, Bradley, Huddersfield Strategic Site

Site Name and Reference	Site Capacity and Proposed Use
	Residential, 1680 units in plan period (294 units beyond the plan period) 
Current land use	Municipal Golf Course
Known abnormal of development issues	Masterplanning work is on-going to establish any further site abnormalities and mitigation.
Transport Issues and Requirements	<p>Bradley Golf Course is located to the north of the A6107 which provides onwards connection to Huddersfield and Brighouse via the A641. The M62 motorway provides the northern boundary of the site, however connectivity to the motorway is currently constrained despite its close proximity. Kirklees Council is seeking to progress a new junction on the motorway (junction 24a) in combination with a number of improvements to the A641 to help facilitate the delivery of the site.</p> <p>The nearest train station is Huddersfield, 3.5 miles to the south west.</p>
Utility Provision ²⁴	<p>The projected maximum electricity demand at the Bradley Road site is 3.55 MW.</p> <p>The closest NPG Substation to the Bradley Road Strategic Site is Brighouse 11kV. The primary substation has sufficient capacity to sustain the proposed growth at the site with a projected available capacity of 3.61 MVA in 2018/2019. However notably, Huddersfield Strategic Site: Bradley Road requires an electrical supply of 98% of the available capacity within the Brighouse 11kV substation.</p> <p>The next closest substations are Deighton (2.17 MVA available capacity) and Emerald Street (1.0 MVA available capacity), which are also short on capacity. Hence, either upgrades are likely to be required in order to accommodate the Bradley Road housing development or electricity is likely to be brought into the area from the more distant substations which would increase cost and reduce reliability.</p> <p>There are no capacity issues related to gas or water supply or treatment affecting this strategic site.</p>

²⁴ Utility capacity analysis is based on level of development set out in the 'capacity assessed in IDP' column of Table 15.1. The development quantum for this site has reduced slightly in the plan period compared to the level assessed in the IDP.

Telecommunications	Explore option for FTTP services as Brighouse exchange is FTTP enabled + Virgin Media
Flood Risk and Drainage issues	This site falls in Flood Risk Zone 1. There is therefore no risk of flooding from fluvial sources. There are ordinary watercourses crossing the site providing potential for surface water flooding. These watercourses are the responsibility of Kirklees Council.
Open Space and Sports requirements	The nearest Open Space to the site is Bradley Park, 0.6 miles to the east. It is likely that Kirklees Council would seek on-site provision of open-space and would direct the developer towards a typology that records a deficiency.
Education requirement	<p>Primary Provision: The nearest primary school is St. Thomas Primary School 1 mile to the east. Further work is required by Kirklees Council to understand the impact of this allocation. Should there be insufficient capacity here then a contribution will be required at the point of planning application based on the number of places required above the existing capacity. The potential to incorporate a new primary school on site is being investigated.</p> <p>Secondary Provision: The nearest secondary school is All Saints Catholic College (0.6 miles). Further work is required by Kirklees Council to understand the impact of this allocation. Should there be insufficient capacity here then a contribution will be required at the point of planning application based on the number of places required above the existing capacity.</p>
Health provision	There are a number of GPs in Deighton and Fartown within a 2 mile radius that are currently accepting new patients. The nearest hospital is Huddersfield Hospital, 2.8 miles south west of the site. As discussed in the health provision chapter if additional GP provision is required the existing facilities will be extended. The most appropriate solution will depend on the size of the proposed population.

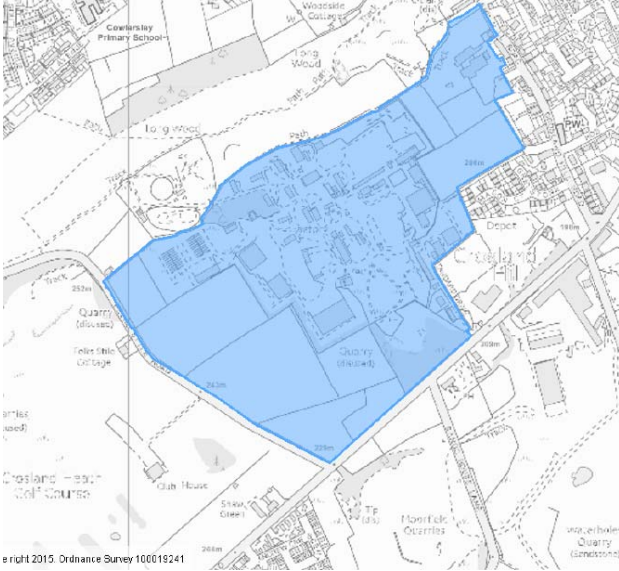
15.4 Land East of Leeds Road, Shaw Cross, Dewsbury Strategic Site

Site Name and Reference	Site Capacity and Proposed Use
Land East of Leeds Road, Shaw Cross, Dewsbury Strategic Site	<p>Mixed use, 1535 units and 122,500 sqm employment land</p> 
Current land use	Agricultural fields
Known abnormal of development issues	Masterplanning work is on-going to establish any further site abnormalities and mitigation.
Transport Issues and Requirements	The site is located to the east of Leeds Road which provides onwards connections to the M62 at the north and Dewsbury to the south. The nearest train station is Batley, 1.4 miles to the west.
Utility Provision ²⁵	<p>The projected maximum electricity demand at the Chidwell site is 1.8 MW.</p> <p>The closest NPG Substation to the Chidwell Strategic Site is Park Road. The primary substation has sufficient capacity to sustain the proposed growth at the site with a projected available capacity of 5.08 MVA in 2018/2019.</p> <p>There are no capacity issues related to gas or water supply or treatment affecting this strategic site.</p>
Telecommunications	Development is in between several exchanges. Early engagement with Openreach recommended to encourage rollout of FTTC / FTTP to development and / or possibly Virgin Media
Flood Risk and Drainage issues	This site falls in Flood Risk Zone 1. There is therefore no risk of flooding from fluvial sources. Multiple watercourses running across the site and create the potential for surface water flooding. These watercourses are the responsibility of Kirklees Council. The Councils Drainage team have noted that the site would benefit from a drainage masterplan.

²⁵ Utility capacity analysis is based on level of development set out in the 'capacity assessed in IDP' column of Table 15.1. The development quantum for this site has increased by 535 dwellings and 122,500 sqm employment compared to the level assessed in the IDP. Further infrastructure analysis will be carried to inform the next draft of Local Plan.

Open Space and Sports requirements	It is likely that Kirklees Council would seek on-site provision of open-space and would direct the developer towards a typology that records a deficiency.
Education requirement	<p>Primary School: The developer has included provision for a primary school within the overall masterplan. Kirklees Council is working to establish future needs.</p> <p>Secondary School: The nearest school is the Manorcroft Academy. Further work is required by Kirklees Council to understand the impact of this allocation.</p>
Health provision	There are a number of GP surgeries within Batley that are currently accepting new patients. The nearest hospital is Dewsbury and District. As discussed in the health provision chapter if additional GP provision is required the existing GP surgeries have the ability to increase their GP capacity. The most appropriate solution will depend on the size of the proposed population.

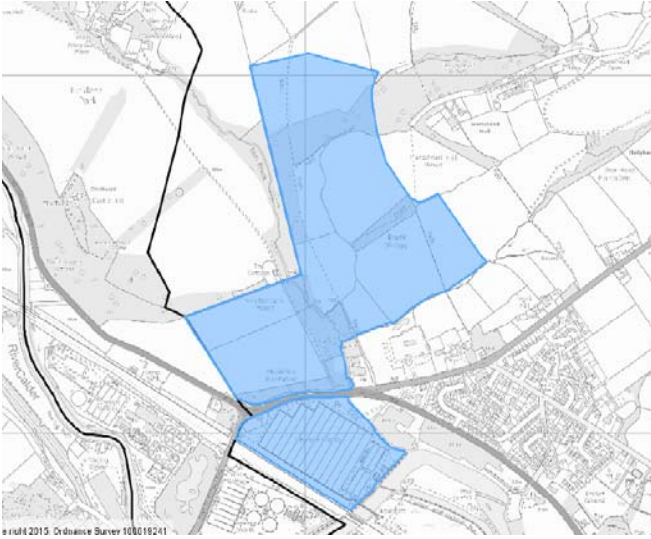
15.5 Land north of Blackmoorfoot Road, Crosland Moor, Huddersfield Strategic Site

Site Name and Reference	Site Capacity and Proposed Use
Land north of Blackmoorfoot Road, Crosland Moor, Huddersfield Strategic Site	Mixed use, 438 units and 51,170 sqm of employment 
Current land use	Part former industrial units, part agricultural fields
Known abnormal of development issues	Masterplanning work is on-going to establish any further site abnormalities and mitigation.
Transport Issues and Requirements	The Land north of the Blackmoorfoot Road site at Crosland Moor would be accessed from Blackmoorfoot Road. It is likely that the site would benefit from wider improvements along the A62 corridor.
Utility Provision ²⁶	The projected maximum electricity demand at the Blackmoorfoot Road site is 0.78 MW. The closest NPG Substation to the Blackmoorfoot Road Strategic Site is Dawker. The primary substation has sufficient capacity to sustain the proposed growth at the site with a projected available capacity of 15.30 MVA in 2018/19. There is no capacity issues related to gas or water supply or treatment affecting this strategic site.
Telecommunications	Promote requirement for at least FTTC services or / and Virgin Media
Flood Risk and Drainage issues	This site falls in Flood Risk Zone 1. Quarry depression. There are no watercourses on site and surface water may need to out fall in to a combined sewer.

²⁶ Utility capacity analysis is based on level of development set out in the 'capacity assessed in IDP' column of Table 15.1. The development quantum for this site has increased by 3 dwellings and 51,170 sqm employment compared to the level assessed in the IDP. Further infrastructure analysis will be carried to inform the next draft of Local Plan.

Open Space and Sports requirements	Crosland Heath golf club is immediately to the west/south west of the site, whilst Broad Oak cricket club is directly west of the site on Cowlersley Lane. Beaumont Park is 2.4 miles to the south east. It is likely that Kirklees Council would seek on-site provision of open-space and would direct the developer towards a typology that records a deficiency.
Education requirement	<p>There is a notable issue with capacity in this part of the Kirklees Council district, and there is a need for an additional 10 forms of entry.</p> <p>Primary Provision: the Blackmoorfoot Road site is in close proximity to Linthwaite Ardron C of E School, Crosland Moor Junior School and Dryclough C of E Infant Schools. Should there be insufficient capacity here then a contribution will be required at the point of planning application based on the number of places required above the existing capacity.</p> <p>Secondary Provision: the Blackmoorfoot Road strategic site is within close proximity to Colne Valley High School, Moor End Technology College. Should there be insufficient capacity here then a contribution will be required at the point of planning application based on the number of places required above the existing capacity.</p>
Health provision	The nearest GP surgeries are located in Milnbridge, Golcar and Huddersfield. All are shown as accepting new patients. As discussed in the health provision chapter if additional GP provision is required the existing facilities will be extended. The most appropriate solution will depend on the size of the proposed population.


15.6 Land at Cooper Bridge Strategic Site

Site Name and Reference	Site Capacity and Proposed Use
Land at Cooper Bridge	<p>Employment, 161,185 sqm of employment land</p> 
Current land use	Agricultural fields
Known abnormal of development issues	Masterplanning work is on-going to establish any further site abnormalities and mitigation.
Transport Issues and Requirements	The site is located to the north/east of the A644 and within -0.5 miles of junction 25 of the M62. Scheme will require A644 Dewsbury to M62 excluding Cooper Bridge improvements and improvements to the highway work to deal with congestion in and around Cooper Bridge Gyratory to support housing and employment growth in the Cooper Bridge area.
Utility Provision ²⁷	<p>The projected maximum electricity demand at the land at Cooper Bridge site is 1.02 MW.</p> <p>The closest NPG Substation to the Land at Cooper Bridge Strategic Site is White Lee. The primary substation has sufficient capacity to sustain the proposed growth at the site with a projected available capacity of 10.72 MVA in 2018/19.</p> <p>There are no capacity issues related to gas or water supply or treatment affecting this strategic site.</p>
Telecommunications	Currently on the edge of Kirklees Core rollout. Explore option for increasing Huddersfield area + other commercial fibre providers.
Flood Risk and Drainage issues	The majority of this site falls in Flood Risk Zone 1. However about a fifth of the site falls within Flood Risk Zone 2 and 3. There would therefore be a requirement for this site to pass the Sequential Test. The surface water flood risk largely confined to line of watercourses, of which there are several along the boundaries and within the site. There is a history of flooding south of Leeds Road. The drainage team recommend that the

²⁷ Utility capacity analysis is based on level of development set out in the 'capacity assessed in IDP' column of Table 15.1. The development quantum for this site has increased 139,782 sqm employment compared to the level assessed in the IDP. Further infrastructure analysis will be carried to inform the next draft of Local Plan.

	Flood Risk Zone 3 area is avoided and a suitable stand-off distance is provided from all watercourses.
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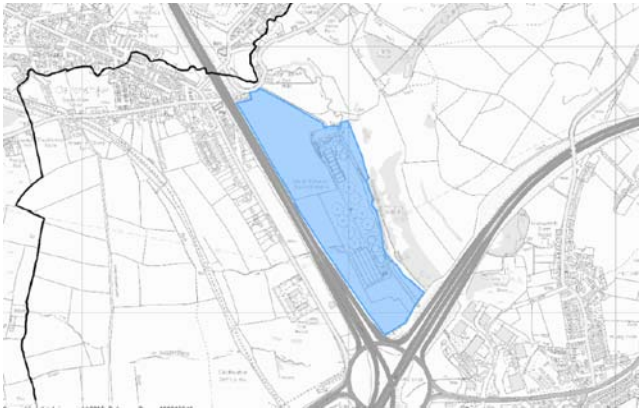
15.7 Land Off A58 Whitehall Road, Cleckheaton Strategic Site

Site Name and Reference	Site Capacity and Proposed Use
Land off A58 Whitehall Road, Cleckheaton	Employment, 41,020 sqm of employment land 
Current land use	Agricultural fields
Known abnormal of development issues	Masterplanning work is on-going to establish any further site abnormalities and mitigation.
Transport Issues and Requirements	Site located immediately off junction 26 of the M62 and M606.
Utility Provision ²⁸	The projected maximum electricity demand at the Whitehall Road, Cleckheaton site is 5.42 MW. The closest NPG Substation to the Whitehall Road, Cleckheaton Strategic Site. The primary substation has sufficient capacity to sustain the proposed growth at the site with a projected available capacity of 14.73 MVA in 2018/19. There is no capacity issues related to gas or water supply or treatment affecting this strategic site.
Telecommunications	Currently well outside Kirklees Core rollout. Explore options for commercial fibre providers from Cleckheaton exchange and / or aggregate multiple tenants for a joint Super Connected Cities voucher application ²⁹
Flood Risk and Drainage issues	This site falls in Flood Risk Zone 1. There is therefore no risk of flooding from fluvial sources. However the tributary to Stubs Beck flows through the western section of the site. Stubs Beck crossed under the A58 outside the site boundary. It is also noted that parts of the site do not naturally fall to these watercourses. Further investigation needed into the possibility of gravity connection for surface water, but this may need to cross third party land and permission may be required. The Kirklees Flood Management team would object to the pumped solutions on this site.

²⁸ Utility capacity analysis is based on level of development set out in the 'capacity assessed in IDP' column of Table 15.1. The development quantum for this site has reduced in the plan period compared to the level assessed in the IDP.

²⁹ e.g. <http://www.superfastwestyorkshire.co.uk/news/108/57/Superfast-100k-investment-boosts-Bradford-businesses>

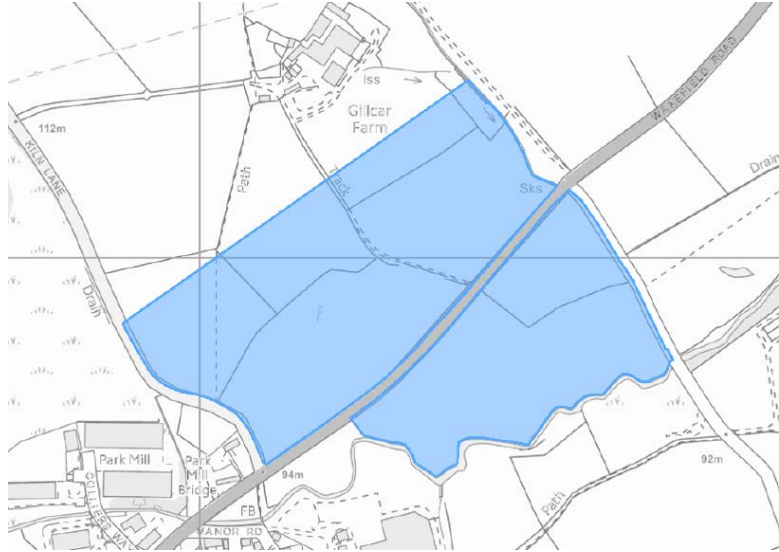
15.8 Former North Bierley Waste Water Treatment Works, Cliff Hollins Lane, Cleckheaton Strategic Site

Site Name and Reference	Site Capacity and Proposed Use
North Bierley Former Waste Treatment Works, Cliff Hollins Lane, Cleckheaton	Employment, 49,000 sqm of employment land 
Current land use	Former Waste Water Treatment Works
Known abnormal of development issues	Masterplanning work is on-going to establish any further site abnormalities and mitigation.
Transport Issues and Requirements	Site is located immediately adjacent to M606 and within close proximity to junction 24 of the M62.
Utility Provision ³⁰	The projected maximum electricity demand at the North Bierley Former WwTW site is 3.85 MW. The closest NPG Substation to the Chain Bar Strategic Site is Snelsins Lane. The primary substation has sufficient capacity to sustain the proposed growth at the site with a projected available capacity of 14.33 MVA in 2018/19. There is no capacity issues related to gas or water supply or treatment affecting this strategic site.
Telecommunications	Currently well outside Kirklees Core rollout. Explore options for commercial fibre providers from Cleckheaton exchange and / or aggregate multiple tenants for a joint Super Connected Cities voucher application ³¹
Flood Risk and Drainage issues	The majority of this site falls in Flood Risk Zone 1. However parts of the site are in Flood Risk Zone 2 and 3. Flood mapping show deep flooding shown at the south-eastern boundary as well as linear patterns reflecting position of watercourse. It will be required that development includes stand-off for maintenance and flood routing. It is recommended that further flood modelling is carried out on this site.

³⁰ Utility capacity analysis is based on level of development set out in the 'capacity assessed in IDP' column of Table 15.1. The development quantum for this site has reduced in the plan period compared to the level assessed in the IDP.

³¹ e.g. <http://www.superfastwestyorkshire.co.uk/news/108/57/Superfast-100k-investment-boosts-Bradford-businesses>

15.9 Land at Wakefield Road and Kiln Lane, Clayton West, Huddersfield Strategic Site

Site Name and Reference	Site Capacity and Proposed Use
Land at Wakefield Road and Kiln Lane, Clayton West, Huddersfield	<p>Employment, 55,196 sqm of employment land.</p> 
Current land use	Agricultural fields
Known abnormal of development issues	Masterplanning work is on-going to establish any further site abnormalities and mitigation.
Transport Issues and Requirements	The site will be accessed from the A636 Wakefield Road. The nearest rail station is Denby Dale, 3.2 miles to the south west.
Utility Provision ³²	<p>The projected maximum electricity demand at the Clayton West site is 1.63 MW.</p> <p>The closest NPG Substation to the Clayton West Strategic Site is Denby Grange. The primary substation has sufficient capacity to sustain the proposed growth at the site with a projected available capacity of 8.37 MVA in 2018/19. It is worth noting though that the Denby Grange substation is approximately five kilometres from the Clayton West site and there is a lack of presence of an electrical network in the area.</p> <p>There is no capacity issues related to gas or water supply or treatment affecting this strategic site.</p>
Telecommunications	Outside Kirklees Core area, but explore option for FTTP services as Skelmanthorpe exchange is FTTP enabled + other commercial fibre providers
Flood Risk and Drainage issues	This site falls in Flood Risk Zone 1. The Kirklees Council Drainage officers note that the linear patterns of and areas of deep ponding result in a risk of flooding from surface water. Further investigation is required as to how this will be avoided and where risk cannot be avoided how it will be mitigated. There are public combined sewers crossing the site that will require suitable stand-off distances. The likely

³² Utility capacity analysis is based on level of development set out in the 'capacity assessed in IDP' column of Table 15.1. The development quantum for this site has reduced in the plan period compared to the level assessed in the IDP.

	<p>discharge of surface water would be greenfield rates (pro-rata) to a relevant watercourse. However soak away testing away from the watercourse maybe required and a 3rd option of combined public sewer is also available. We therefore see no problem in draining the site subject to investigation of condition etc.</p>
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16 Infrastructure Delivery Programme

16.1 Introduction

This section takes the evidence and analysis from Sections 4 through to 15 and sets out how the level of current, planned and future infrastructure that will or could be delivered. This section:

- presents the indicative costs associated with delivering the planned and future infrastructure required to support the long term growth objectives in Kirklees;
- outlines how Kirklees Council could look to prioritise and facilitate the delivery of infrastructure; and
- summarises potential funding sources that Kirklees Council could explore to deliver on its infrastructure requirements.

In simple terms, this part of the report takes the overall cost of each infrastructure type and sets that within the context of any existing funding, so as to determine any funding gaps. From here it will be possible to identify potential options for bridging the funding gaps and ensure Kirklees can be proactive in looking to deliver its infrastructure requirements whilst recognising the difficult funding climate expected ahead.

The costs and information shown have been determined through an analysis of the evidence base and discussions with relevant contacts in Kirklees, other public and private sector organisations and wider stakeholders. The contact details of all consulted stakeholders can be found in Appendix A.

16.2 Kirklees infrastructure Requirements and Investment

16.2.1 Overview

Figure 16.1 sets out the Infrastructure Delivery Programme details, which shows all the required infrastructure provision in the Kirklees district, based on available information in compiled in June / July 2015.

The Infrastructure Delivery Programme details all the infrastructure requirements for the Kirklees district up to 2031, with funding costs provided where available. The schedule also details any committed funding sources and potential funding mechanisms, before confirming if there is a gap in infrastructure provision. The infrastructure requirements have been split into the following categories:

- ‘Essential’ infrastructure is defined as infrastructure that is required to make development acceptable in planning terms.
- ‘Desirable’ infrastructure is described as infrastructure which would improve the capacity and deliver place making benefits.

What is noticeable from an analysis of Table 16.1 is that a number of elements of Kirklees's infrastructure already have firm funding or funding allocations. This includes secondary schools and local health provision.

This currently puts Kirklees in a relatively positive position in terms of funding infrastructure, subject to existing funding allocations becoming firm funding commitments.

There are certain infrastructure types where funding gaps do exist. This relates to infrastructure which will play an important role in delivering the future housing and economic growth of Kirklees.

16.2.2 Essential Infrastructure

The majority of infrastructure identified as essential has committed funding. Generally this is through the West Yorkshire Plus Transport Fund (WF+TF) or through private or Council funds. The infrastructure where there is a shortfall in funding is set out below:

- **South Huddersfield Arterial Route Improvements:** this scheme is partly funded through the West Yorkshire Transport Fund Highways Efficiency. However a shortfall in funding of up to £10 million remains. Kirklees Council are investigating funding options.
- **The A652 Bradford Road corridor:** there is currently no identified funding for this scheme, which seeks remodel junctions on Alexandra Road, Rouse Mill Lane and Challenge Way. Kirklees Council are investigating options to fund this scheme, which could include CIL or S106.
- **Holmfirth Isolated junction improvements:** this scheme is currently been worked up in more detail based on the growth levels in the emerging Local Plan. There is currently no defined funding source for this scheme.
- **Rail Station Cycle Improvements:** this is partly funded by the WY+TF and it is likely that Train Operating Company funds can be used to fund the shortfall.
- **Walking and Cycling Improvement Schemes:** a programme of core cycling and walking schemes in around Kirklees connecting to key employment and regeneration sites is partly funded, however a £4 million funding gap remains. Kirklees Council are investigating options to fund this scheme.
- **Flood Alleviation Schemes:** The main source of funding for flood alleviation schemes will be via the Environment Agency Grant in Aid funding programme, supported by partnership funding from Kirklees Council Capital Plan and, where possible, private contributions. This no funding streams are currently secured for these schemes.
- **Education:** Kirklees Council are currently evaluating the need to include new schools across a range of their strategic sites. Further work is necessary to understand fully whether these will be needed. It is therefore not currently clear if there is a funding gap for education provision. Should specific education infrastructure be required it is possible in that they will be delivered

by the site's developer. The exact gap in education provision will only be known following detailed capacity work by Kirklees Council. Following this work funding streams will need to be identified to support the delivery of additional new schools within the district. They are likely to be Basic Needs Allowance, CIL and on-site school provision on strategic sites.

- **Open Space and Green Infrastructure:** The Council are seeking to confirm the exact gap in open space provision based on new standards and will then seek to deliver open space where required through on site provision and / or the use of CIL. There is potentially a gap in the funding of open space provision, however further work needs to be carried out by Kirklees Council to confirm this.
- **Sports, Leisure and Recreation:** There has been an increase in provision in recent years and Kirklees Council will seek to deliver new facilities through both the Local Plan and wider community investment (e.g. bids for Sport England funding). There is however an identified gap in the funding of sports, leisure and recreation provision.

16.2.3 Desirable Infrastructure

The majority of infrastructure identified as desirable has potential funding sources, but these are generally not committed. The desirable infrastructure where there is a shortfall in funding are set out below:

- **Calder Valley Electrification:** there is not committed funding for this scheme, however it only has limited benefits to the Kirklees District and therefore is not an essential scheme.
- **Community and Cultural:** there is currently a gap in funding for a number of desirable community and cultural schemes, including:
 - Creation of a new visitor centre at Holmfirth.
 - Upgrades to the Tolson Museum.
 - Upgrades to the Huddersfield Art Gallery.
 - Castle Hill and Victoria Tower Refurbishments.
 - Delivery of the recommendations from the Oakwell Hall Masterplan.

Kirklees Council are investigating funding options to deliver these schemes. However they are not essential to the delivery of the growth levels set out in the emerging Local Plan.

Figure 16.1: Infrastructure Delivery Programme

Ref	Location (Where)	Scheme	Essential / Desirable	Need for scheme (Why)	Requirements of scheme / comments	Lead delivery agency/ management organisation	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding	Baseline source
Transport											
Highways											
TS1	Huddersfield and Dewsbury / Midfield	A62 Huddersfield to junction 25 of the M62, via the A62, Cooper Bridge and the A644	Essential	Scheme seeks to improve the accessibility of Huddersfield by dealing with congestion in and around the Cooper Bridge area and the A62, making it more attractive to investment and by providing better accessibility to existing and new housing and employment designations around the Cooper Bridge and Bradley Area.	The scheme will involve primarily junction redesign to improve their operational efficiency and includes work to: A62 Leeds Road/Bradley Mills Road A62 Leeds Road/ A6107 Bradley Road A62 Leeds Road/ A644 Wakefield Road (Cooper Bridge) A62 Leeds Road/ A644 Huddersfield Road (Three Nuns) A62 Leeds Road/ Sunny Bank Road A62 Huddersfield Road/ A649 Halifax Road and selected links between these junctions, including traffic management treatment (such as reducing instances of on-street parking and loading to ensure optimal operation efficiency of the highway and the potential provision of a Cycle Super Highway on Leeds Road	Kirklees Council West Yorkshire Combined Authority (WYCA)	Funding Secured through West Yorkshire Plus Transport Fund WY+TF The scope of the works required is currently being defined.	£69.3m	Medium term (5-10 years) 2023/24	A £6 Million gap, but developer funding expected No gap	Kirklees Council Saturn transport model outputs Kirklees Council Cabinet Report entitled "WY+TF"(April 2013) Updated Kirklees Internal Project Reviews
TS2	Huddersfield	New Motorway Junction 24a on the M62	Essential	Scheme seeks to provide a new motorway junction to accommodate Kirklees and Calderdale development aspirations in the Bradley and Cooper Bridge area and to tackle regular delays and queuing vehicles backing up on the M62.	A new diamond interchange with the A641 will provide better access to the M62 for residents and businesses in North Huddersfield and East Calderdale and could support potential housing and employment growth. For Kirklees this scheme compliments the proposed scheme at J24a and seeks to provide capacity improvement between that and Huddersfield by improving the operational efficiency of the junctions and highway links. A641/Fartown Green Rd/Spaines Road Fartown Bar A641/Willow Lane and selected links between these junctions, including traffic management treatment (such as reducing instances of on-street parking and loading to ensure optimal operation efficiency of the highway.	Kirklees Council West Yorkshire Combined Authority (WYCA)	The scheme has funding allocated in the Yorkshire Plus Transport Fund WY+TF, but is not currently in Highways England's Road Investment Strategy. Work is currently being undertaken in partnership with Highways England to understand in detail the full economic benefits of the scheme for both the local and the strategic network. The scope of the works required on the A641 is being defined- The indicative cost is currently being reconsidered.	£50 – 60m	Medium term (5-10 years) 2021/22	No gap	Kirklees Council Cabinet Report entitled "WY+TF"(April 2013)
TS3	Huddersfield	South Huddersfield Arterial Route Improvements	Essential	To support potential development allocations in South Kirklees	Substantial junction reconfigurations/traffic management on associated arterial routes traffic management at the following junctions in South Kirklees/ Huddersfield associated arterial routes between the junctions to	Kirklees Council West Yorkshire Combined	Part funded through the West Yorkshire Transport Fund Highways Efficiency	£10 -£15m	Medium term (5-10 years)	Potentially £10 m	Kirklees Council Saturn transport model outputs

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					accommodate potential new development and increase their operational efficiency: A616 Woodhead Road/ B6108 Meltham Road (Lockwood Bar) A616 Chapel Hill/ A62Queensgate A62 Queensgate/A629 Wakefield Road (Shorehead) A629 Wakefield Road/B6432 St Andrews Road	Authority (WYCA)	and Bus Priority Package				Kirklees Council Cabinet Report entitled "WY+TF"(April 2013)
TS4	Huddersfield	Halifax - Huddersfield A629 Corridor	Essential	The scheme will help support Huddersfield town centre, cater for potential housing and employment growth in this area and provide a faster more sustainable and reliable route between Huddersfield and the M62.	The scheme includes major and minor junction and highway link improvements for access into Huddersfield along the corridor. Options for express buses are also under consideration.A629/A643 Ainley Top Roundabout A629/East Street Cavalry Arms Selected links between these junctions, including traffic management treatment (such as reducing instances of on-street parking and loading to ensure optimal operation efficiency of the highway.	Kirklees Council West Yorkshire Combined Authority (WYCA)	Funding secured through West Yorkshire Plus Transport Fund WY+TF Progressing towards Gateway 1 submission.	£11m	Short term (0-5 years) 2019/20	No gap	Kirklees Council Cabinet Report entitled "WY+TF"(April 2013)
TS5	Dewsbury & Mirfield	A653 Leeds Road corridor and Dewsbury Area Integrated Transport Strategy	Essential	The scheme also seeks to use transport / public realm improvements to re-image Dewsbury Town Centre as a catalyst to kick start economic regeneration Dewsbury by encouraging investment and inward migration to the local area.	Area-wide highway and public transport, cyclist and pedestrian improvements to address local congestion issues and the associated impact of a large housing allocation in South Dewsbury. The scheme provides a substantial length of new link road south of Dewsbury to provide access to and mitigate the effects of the new housing allocation. There will also be improvements along the A653 Leeds to Dewsbury corridor, in particular the reconfiguration of the junction of the A653 and the B6128 (Shaw Cross) to facilitate improvements in bus and car journey times between Dewsbury and Leeds and to accommodate a major mixed-use allocation in Chidswell.	Kirklees Council West Yorkshire Combined Authority (WYCA)	Funding secured through West Yorkshire Plus Transport Fund WY+TF The works required is being defined.	£10m	Medium term (5-10 years) 2022/23	No gap	Kirklees Council Cabinet Report entitled "WY+TF"(April 2013)
TS6	Dewsbury and Batley	The A652 Bradford Road corridor	Essential	Improvements to Alexandra Road, Rouse Mill Lane and Challenge Way, including junction remodelling which will provide benefits for private vehicles, buses, cyclists and pedestrians	The scheme will provide for future housing and employment growth in the local area and also maximise the benefits of the Bradford Road corridor as a well-developed and popular employment and entertainment destination. This scheme will need to be increased in scope to reflect results from the traffic modelling which highlighted the junction of the A62/A643 (Coach and Six) as requiring mitigation measures to accommodate potential local plan development in 2020 and 2030.	Kirklees Council	Not defined, but CIL or S106 could be considered.	£20m	Medium term (5-10 years)	£20m	Kirklees Council Saturn transport model outputs Kirklees Council
TS7	District Wide	Highways Efficiency and Bus Priority Programme	Essential	To improve bus journey times.	A comprehensive and substantial upgrade of all 'core' routes across West Yorkshire to reduce congestion, improve reliability and speed up journey times. Route-by-route, a mix of measures will be applied to tackle congestion hotspots, improve junctions, manage parking better whilst improving conditions for pedestrians, cyclists and local businesses and communities. The bus element is targeted at reducing operating costs by reducing journey	Kirklees Council West Yorkshire Combined Authority (WYCA)	Funding secured through West Yorkshire Plus Transport Fund WY+TF	£158 M (across West Yorkshire)	Medium term (5-10 years)	No gap	Kirklees Council Cabinet Report entitled "WY+TF"(April 2013)

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Ref	Location (Where)	Scheme	Essential / Desirable	Need for scheme (Why)	Requirements of scheme / comments	Lead delivery agency/ management organisation	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding	Baseline source
					times, converting the bus fleet to low carbon and improving passenger information. In addition to the corridors identified above, this also includes for Kirklees: A629 Wakefield Road from Huddersfield Ring Road to Waterloo junction A638 Cleckheaton to (but not including) junction 26 of the M62 (Chain Bar Roundabout) A641 Bradford Road/Huddersfield Road.						
TS8	District Wide	Highway Network Efficiency Programme	Essential	This scheme tackles congestion across West Yorkshire with improvements to traffic control systems and integration of traffic management and traffic signal control centres. This will facilitate the creation of management plans for specific corridors tailored to reduce congestion and delays. It will also provide better resilience to extreme weather events	This scheme tackles congestion across West Yorkshire with improvements to traffic control systems and integration of traffic management and traffic signal control centres. This will facilitate the creation of management plans for specific corridors tailored to reduce congestion and delays. It will also provide better resilience to extreme weather events. Introduction of small-scale traffic signal improvements on a defined West Yorkshire key route network and the introduction of a West Yorkshire Common Database for more reactive traffic signal monitoring and real time information dissemination to deal with events on the highway.	Kirklees Council West Yorkshire Combined Authority (WYCA	Funding secured through West Yorkshire Plus Transport Fund WY+TF Gateway 1 Submission Dec 2015	£7.3m (across West Yorkshire)	Short term (0-5 years) 2018	No gap	Kirklees Council Cabinet Report entitled "WY+TF"(April 2013)
T9	Holmfirth	Isolated junction improvements	Essential	To support potential development allocations in South Kirklees	To be determined after further investigations.	Kirklees Council	Kirklees Council are investigating funding options.	£10m	Medium term (5 – 10 years)	£10m	Kirklees Council Saturn transport model outputs
Public Transport Improvement Schemes											
T10A	District Wide	Huddersfield Town Centre	Essential	The proposed changes will open up access and improve the connection across the town centre as an enabler for improving the shopping experience in Huddersfield and ultimately support trade and economy in the town. Improved public transport operation in Huddersfield will	Plans include re-routing and restricting some vehicle movements, new loading bays, changes to parking areas, and improving footways and bus shelters.	Kirklees Council	Local Transport Plan Integrated Transport Block	£1.3m	Ongoing	No gap	Kirklees Council Highways Capital Plan

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Ref	Location (Where)	Scheme	Essential / Desirable	Need for scheme (Why)	Requirements of scheme / comments	Lead delivery agency/ management organisation	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding	Baseline source
				improve journey times and promote the bus as a realistic alternative to the private car, leading to modal shift and a reduction in congestion from the impacts of proposed allocations across the district.							
T10B	District Wide	Huddersfield Station Gateway	Essential	Provision of high quality rail infrastructure contributes to modal shift away from the private car which in turn reduces congestion allowing. It also encourages investment and builds on regeneration already taking place around the station.	Provision of car parking on the St Georges Square Warehouse a new subway linking the car parking to Huddersfield Station which will improve the experience for existing users but also address the suppressed demand for rail parking.	Kirklees Council West Yorkshire Combined Authority (WYCA)	Funding secured through West Yorkshire Plus Transport Fund WY+TF	£5m	Short Term (0-5 years) 2015 - 2018	No gap	Kirklees Council Cabinet Report entitled "WY+TF" (April 2013)
T10C	District Wide	Electrification of the Trans Pennine Line	Essential	Increase frequency of service and journey times. Stimulate economic growth in the north of England through better connections between key towns and cities, which will improve the attractiveness of Huddersfield as a location to invest in	Electrification of the Trans-pennine line from York to Manchester to reduce journey times to 45 minutes between Leeds and Manchester and provide six trains per hour.	Department for Transport Network Rail	Funding secured from Department for Transport	£290m	Medium Term (5-10 years)	No gap	Discussions with Kirklees Council officers
T10D	District Wide	Calder Valley Electrification	Desirable	Enhance services on the Caldervale Line where service quality is currently poor.	Line-speed and capacity improvements, including improved rolling stock and electrification, to enable faster inter-urban long-distance services, and more frequent commuter services. Following the electrification of the Trans-pennine line this would allow electric trains to operate between Sowerby Bridge and Mirfield. An Electrification Task Force is currently confirming prioritisation for electrification scheme. The Calder Valley Line is included in the 2009 RUS, but is not prioritised. The RUS is currently being refreshed by Network Rail.	WYCA / CBMDC / Network Rail	Funding would need to be a mixture Department for Transport and of Train Operating Company (TOC) funding.	Unknown	Medium term (5 – 10 years)	No committed funding confirmed.	Network Electrification Rail Utilisation Strategy (RUS), 2009

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Ref	Location (Where)	Scheme	Essential / Desirable	Need for scheme (Why)	Requirements of scheme / comments	Lead delivery agency/ management organisation	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding	Baseline source
T10E	District Wide	Rail Parking (Mirfield and Ravensthorpe)	Essential	Increase in Rail parking	The scheme is designed to support sustainable employment growth in the main urban centres and will particularly benefit commuters, but also support more travel into the urban centres by rail. The Mirfield scheme is of particular importance as it will enhance connectivity to, from and within West Yorkshire. The scheme will deliver localised benefits as a result of improved access to the rail network. The scheme will support housing and employment growth, particularly in South Dewsbury	Kirklees Council West Yorkshire Combined Authority (WYCA)	Funding secured through West Yorkshire Plus Transport Fund WY+TF Gateway 1 Submission Dec 2015	£177,000	Short Term (0-5 years) 2015 - 2018	No gap	Funding secured through West Yorkshire Plus Transport Fund WY+TF Gateway 1 Submission Dec 2015
TS10F	District Wide	Railway Station Cycle Improvements	Essential	To improve cycle provision at railway stations.	Huddersfield, Dewsbury, Mirfield and Batley stations were also announced as beneficiaries of the Government's Cycle Rail Fund to improve cycle facilities at selected railway stations. <ul style="list-style-type: none"> Dewsbury station will receive a £69,397 grant towards improving cycling facilities. Huddersfield will receive a £81,297. Mirfield and Batley stations will share a £171,000 grant. 	Train Operating Companies (Northern and Trans-pennine)	Cycle Rail Fund Train Operating Companies	£14.5m	Short term (0 - 5 years)	Part gap in funding, potentially filed by Train Operating Companies	Discussion with Kirklees Officers
Walking and Cycling											
T11	District Wide	Walking and Cycling Improvement Schemes	Essential	A programme of core cycling and walking schemes in around Kirklees connecting to key employment and regeneration sites as per the walking and cycling network. Encouraging cycling and walking by improving facilities can save large amounts of money otherwise spent on the NHS and can reduce pollution and congestion.	The schemes will comprise: <ul style="list-style-type: none"> High quality segregated cycle routes in Huddersfield Town Centre connecting to the Strategic Employment Area of Cooper Bridge on the Upper Calder Valley towpath; Additional cycle parking; and Connections to Golcar on the Huddersfield to Marsden towpath (providing 35km of segregated cycle route). 	Kirklees Council West Yorkshire Combined Authority (WYCA)	CityConnect Funding. Local Transport Plan Integrated Transport allocation Developer Contributions	£6m	Short term (0 - 5 years)	£4m	Discussion with Kirklees Officers
TS12	District-wide	Motorway link and junction improvements	Essential	Make the network safer, support the smooth flow of traffic, and encouraging economic growth	M1 Junctions 39-42 – upgrading the M1 to Smart Motorway, including the use of hard-shoulder running, between junction 39 (Denby Dale) and junction 42 (M62 interchange) near Wakefield. M62/M606 Chain Bar – provision of a direct link from the M62 westbound to the M606 northbound and removing significant congestion from the main part of the existing junction.	Highways England	Roads Investment Strategy	£1.4 billion across the North East and Yorkshire)	Short to medium term(5 years)	No gap	Department for Transport Road Investment Strategy 2015/16 to 2019/20.

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					M62 Junctions 20-25 – upgrading the M62 to Smart Motorway between junction 20 (Rochdale) and junction 25 (Brighouse) across the Pennines. Together with other Smart Motorways already under construction in Greater Manchester and existing Smart Motorways in Yorkshire, this will provide a full four lane Smart Motorway link between Leeds and Manchester. A628 climbing lanes – consideration of the provision of two overtaking lanes on the A628 near Woodhead Bridge and near Salter’s Brook Bridge						
Utilities											
U1	Kirklees Rural	Electricity Upgrades in Kirklees Rural	Essential	To provide adequate electricity capacity.	Extension of the existing 33kV NPG network may be required in Kirklees Rural, as there is less of a presence of a network in these areas.	Developer Northern Powergrid	Developer Northern Powergrid	£unknown	Dependent on delivery of growth.	No gap	Discussion with Northern Powergrid and Arup analysis
U2	Batley and Spen	Electricity Upgrades in Batley and Spen	Essential	To provide adequate electricity capacity	Extension of the existing 33kV NPG network may be required in Batley and Spen, as there is less of a presence of a network in these areas.	Developer Northern Powergrid	Developer Northern Powergrid	£unknown	Dependent on delivery of growth.	No gap	Discussion with Northern Powergrid and Arup analysis
U3	Huddersfield	Electricity Upgrades in Huddersfield	Essential	To provide adequate electricity capacity.	Upgrades to the substations around the Bradley Golf Course Strategic Site will be required to support the development, including Brighouse 11kV, Deighton and Emerald Street	Developer Northern Powergrid	Developer Northern Powergrid	£unknown	Dependent on location and phasing of growth	No gap	Discussion with Northern Powergrid and Arup analysis
U4	District wide	Potential Gas Reinforcements	Essential	To provide adequate gas capacity	Developers will pay for these local connections. If it is necessary to reinforce the network upstream of the connection point, an Economic Test is applied to these costs by NGN.	Developers Northern Gas Network	Developers Northern Gas Network	£unknown	Dependent on location and phasing of growth	No gap	Discussion with Northern Gas Networks and Arup Analysis
U5	Kirklees Rural	Wastewater Capacity Improvements	Essential	To meet water quality and waste water treatment capacities	Planned water quality and capacity improvements at Meltham, Clayton West and Neiley (Holmfirth) WWTW to meet growth requirements up to 2030.	Yorkshire Water	Funded through Yorkshire Water AMP 6.	£unknown	Short term (0 -5 years)	No gap	Discussion with Yorkshire Water
U6	District Wide	Wastewater Capacity Improvements (if required)	Essential	To meet waste water requirements of planned growth (if required)	If further capacity is required Yorkshire Water will work closely with Kirklees Council and the developer to agree a phased approach to delivery and an agreement on the required upgrade works. Yorkshire Water seeks to align investment plans with development needs. If growth within a waste water catchment requires an increase in capacity at the receiving Works (or in some cases the sewerage network) which is not otherwise subject to investment (for example to meet new water quality requirements) Yorkshire Water will work with Kirklees to ensure that the development is appropriately phased to ensure that it is not occupied/operational until the necessary infrastructure in place	Developer Yorkshire Water	Developer Yorkshire Water	£unknown	Dependent on location and phasing of growth	No gap	Discussion with Yorkshire Water
Waste Management											

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Ref	Location (Where)	Scheme	Essential / Desirable	Need for scheme (Why)	Requirements of scheme / comments	Lead delivery agency/ management organisation	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding	Baseline source
W1	District Wide	New Energy from Waste Facilities.	Essential	To meet projected increases in waste arising's.	Additional Energy for Waste provision is required within the plan period as the existing facility is coming to the end of its operational life. Kirklees Council currently considering options to extend life of existing facility or work with neighbouring authorities on a joint new facility.	Kirklees Council Private waste firms	Private funding Kirklees Council Council tax	£unknown	Medium Term (5 -10 years) In place by 2022/23 or 2028 depending on extension of current contract.	No gap	Urban Vision Waste Projections.
W2	District Wide	Two new MRFs in North Kirklees	Essential	To meet projected increases in waste arising's.	Two additional MRFs are required to meet projected increase in waste arising's. Kirklees Council are investigating potential sites.	Kirklees Council Private waste firms	Private funding Kirklees Council Council tax	£unknown	Medium Term (5 -10 years).	No gap	Urban Vision Waste Projections.
W3	District Wide	Additional landfill capacity.	Essential	To meet projected increases in waste arising's.	There is potential that an existing landfill site in Kirklees has adequate capacity for the plan period. However a new planning permission is required to allow this capacity to be realised,	Private waste firms	Private funding	£unknown	Short term (0 -5 years).	No gap	Urban Vision Waste Projections.
Telecoms											
TC1	District Wide	BDUK Phase 2	Essential	To improve broadband provision.	BDUK Phase Two Improvements: A £13 million scheme to improve broadband across West Yorkshire and York. Kirklees Borough did not receive any funding through phase 1, and therefore are receiving 42% of the £13 million phase two funding. This seeks to deliver up to 24mb broadband and targets locations with poor broadband speeds. This means the focus is generally on rural areas.	BDUK	BDUK	£5.5m	Short Term (0 – 5 years) The BDUK scheme begins in September 2015 and is scheduled for completion by 2019.	No gap	Discussion with Kirklees Officers
TC2	District Wide	Super Connected Cities Voucher Scheme	Essential	To improve broadband provision.	Super Connected Cities Voucher Scheme: A scheme allowing businesses to access £3,000 of grant funding to subsidise access to fibre providers.	Kirklees Council WYCA	WYCA	£unknown	Short Term (0 – 5 years)	No gap	Discussion with Kirklees Officers
TC3	District Wide	Kirklees Core	Essential	To improve broadband provision.	Kirklees Core: The delivery of a pure fibre network with Fibre to the Premises (FTTP) focused on employment locations. This project is about the delivery of City Fibre with IX in Leeds to attract inward investors requiring fast broadband of up to a gigabit. The focus on Kirklees Core is on the financial and healthcare sector, is part funded through the Super Connected Cities Voucher	City Fibre	Private Investment	£unknown	Short Term (0 – 5 years)	No gap	Discussion with Kirklees Officers
TC4	District Wide	Site by Site Broadband Investment	Essential	To deliver broadband to proposed development sites.	Each individual developer will be responsible for securing telecoms services suitable for their own development. Typically this will result in each developer approaching broadband providers who will respond in piecemeal fashion. Previous experience of both housing and employment oriented developments suggests that the planning and ordering of telecoms services often comes very late in the design & construction programme. This can	Developers	Developers Telecom Providers	£unknown	Across Plan Period	No gap	Discussion with Kirklees Officers

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Ref	Location (Where)	Scheme	Essential / Desirable	Need for scheme (Why)	Requirements of scheme / comments	Lead delivery agency/ management organisation	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding	Baseline source
					result in developers delivering standard services from one or a limited number of operators.						
Flood Risk and Drainage											
F1	Batley & Spen	Batley Flood Alleviation Scheme	Desirable			Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£1.5m	Short Term (0-10 years) 2016-2023	To be confirmed	Yorkshire RFCC Investment Programme 2015/2016 onwards
F2	Batley & Spen	Cleckheaton Flood Alleviation Scheme	Desirable			Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£1.7m	Short to Medium Term (0 – 10 years) 2018 to 2021	To be confirmed	Yorkshire RFCC Investment Programme 2015/2016 onwards
F3	Dewbury & Mirfield	Dewsbury Flood Alleviation Scheme	Desirable			Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£4.2m	Medium Term (2021 onwards)	To be confirmed	Yorkshire RFCC Investment Programme 2015/2016 onwards
F4	Huddersfield	Huddersfield A62 Corridor Flood Alleviation Scheme	Desirable			Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£1.4m	Short Term (0-5 years) 2016 - 2018	To be confirmed	Yorkshire RFCC Investment Programme 2015/2016 onwards
F5	District Wide	Kirklees Culvert Programme	Desirable			Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£970,000	Short Term (0-5 years) 2016 - 2018	To be confirmed	Yorkshire RFCC Investment Programme 2015/2016 onwards
F6	Batley & Spen	Liversedge Flood Alleviation Scheme	Desirable			Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£1.6m	Medium Term (2021 onwards)	To be confirmed	Yorkshire RFCC Investment Programme 2015/2016 onwards
F7	Batley & Spen	Batley Beck Scheme Replacement – Culverts / Wall Repairs	Desirable			Environment Agency	EA Grant & Aid Funding Private contributions European Structural Funds	£5m	Medium Term (5 years- on) 2021 -	To be confirmed	Yorkshire RFCC Investment Programme 2015/2016 onwards
F8	Dewsbury & Mirfield	Dewsbury Scheme Replacement	Desirable			Environment Agency	EA Grant & Aid Funding	£6.5m	Medium Term	To be confirmed	Yorkshire RFCC Investment

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							Private contributions European Structural Funds		(2021 onwards)		Programme 2015/2016 onwards
F9	Batley & Spen	Spen Scheme Replacement	Desirable			Environment Agency	EA Grant & Aid Funding Private contributions European Structural Funds	£3m	Medium Term (2021 onwards)	To be confirmed	Yorkshire RFCC Investment Programme 2015/2016 onwards
F10	Kirklees Rural	Clayton West and Scissett Flood Alleviation Scheme	Desirable			Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£300,000	Short to Medium Term (0 – 10 years) 2018 to 2021	To be confirmed	Yorkshire RFCC Investment Programme 2015/2016 onwards
F11	Kirklees Rural	Holmfirth Flood Alleviation Scheme	Desirable			Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£500,000	Medium Term (2021 onwards)	To be confirmed	Yorkshire RFCC Investment Programme 2015/2016 onwards
F12	Dewsbury & Mirfield	Ings Crescent Flood Alleviation Scheme	Desirable			Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£220,000	Short to Medium Term (0 – 10 years) 2018 to 2021	To be confirmed	Yorkshire RFCC Investment Programme 2015/2016 onwards
F13	Huddersfield	New Mille Road (Brockholes) Flood Alleviation Scheme	Desirable			Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£40,000	Short Term (0-5 years)	To be confirmed	Yorkshire RFCC Investment Programme 2015/2016 onwards
F14	Dewsbury & Mirfield	Ravensthorpe Flood Alleviation Scheme	Desirable			Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£1.4m	Short to Medium Term (0 – 10 years) 2018 to 2021	To be confirmed	Yorkshire RFCC Investment Programme 2015/2016 onwards
F15	Huddersfield	Grimescar Dike	Desirable			Environment Agency	EA Grant & Aid Funding Private contributions European Structural Funds	£175,000	Short Term (0-5 years)	To be confirmed	Yorkshire RFCC Investment Programme 2015/2016 onwards
F16	Kirklees Rural	Kirklees Upland Catchment Management Scheme	Desirable			Kirklees Council	EA Grant & Aid Funding Private contributions	£100,000	Short Term (0-5 years)	To be confirmed	Yorkshire RFCC Investment

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Ref	Location (Where)	Scheme	Essential / Desirable	Need for scheme (Why)	Requirements of scheme / comments	Lead delivery agency/ management organisation	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding	Baseline source
							European Structural Funds				Programme 2015/2016 onwards
F17	Districtwide	Schools in Kirklees Flood Alleviation Scheme	Desirable			Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£50,000	Short Term (0-5 years)	To be confirmed	Yorkshire RFCC Investment Programme 2015/2016 onwards
F18	Huddersfield	Blackhouse Dike Culvert	Desirable			Environment Agency	EA Grant & Aid Funding Private contributions European Structural Funds	£110,000	Medium Term (2021 onwards)	To be confirmed	Yorkshire RFCC Investment Programme 2015/2016 onwards
F19	Kirklees Rural	Box Ings Culverts	Desirable			Environment Agency	EA Grant & Aid Funding Private contributions European Structural Funds	£165,000	Medium Term (2021 onwards)	To be confirmed	Yorkshire RFCC Investment Programme 2015/2016 onwards
F20	Huddersfield	Crimble Clough Culvert	Desirable			Environment Agency	EA Grant & Aid Funding Private contributions European Structural Funds	£110,000	Medium Term (2021 onwards)	To be confirmed	Yorkshire RFCC Investment Programme 2015/2016 onwards
F21	Kirklees Rural	Crowhill Culverts	Desirable			Environment Agency	EA Grant & Aid Funding Private contributions European Structural Funds	£165,000	Medium Term (2021 onwards)	To be confirmed	Yorkshire RFCC Investment Programme 2015/2016 onwards
F22	Kirklees Rural	Marsden Culvert	Desirable			Environment Agency	EA Grant & Aid Funding Private contributions European Structural Funds	£170,000	Medium Term (2021 onwards)	To be confirmed	Yorkshire RFCC Investment Programme 2015/2016 onwards
F23	Batley & Spen	Spen Culverts Replacement	Desirable			Environment Agency	EA Grant & Aid Funding Private contributions European Structural Funds	£220,000	Medium Term (2021 onwards)	To be confirmed	Yorkshire RFCC Investment Programme 2015/2016 onwards
F24	Dewsbury & Mirfield	Mirfield Flood Alleviation Scheme	Desirable			Kirklees Council	EA Grant & Aid Funding Private contributions	£1.1m	Medium Term (2021 onwards)	To be confirmed	Yorkshire RFCC Investment

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							European Structural Funds				Programme 2015/2016 onwards
F25	District wide	Ordinary Watercourses FRM	Desirable			Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£804,000	Medium Term (2021 onwards)	To be confirmed	Yorkshire RFCC Investment Programme 2015/2016 onwards
F26	District wide	Property Cluster FRM	Desirable			Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	£705,000	Medium Term (2021 onwards)	To be confirmed	Yorkshire RFCC Investment Programme 2015/2016 onwards
F27	District wide	A number of further district wide schemes	Desirable		There are a number of district wide schemes that are to be led by the Environment Agency and Kirklees Council. These schemes do not yet have a committed date for completion	Environment Agency and Kirklees Council	EA Grant & Aid Funding Private contributions European Structural Funds	Approx. £30m	Medium Term (2021 onwards)	To be confirmed	Yorkshire RFCC Investment Programme 2015/2016 onwards
F28	District wide	Delivery of new SUD responsibilities	Essential	To meet new SUD responsibilities from April 2015.	Kirklees Council in partnership with their West Yorkshire Local Planning Authority partners and City of York Council have produced a guidance document for developers on SUDs. They are working with developers to meet the national SUD requirements.	Kirklees Council	Developer to deliver SUDs schemes S106 to provide maintenance costs	£unknown	Throughout plan period	No gap	Discussion with Officers
Education											
E1	District Wide	Planned New Schools	Essential	To meet existing capacity issues	Kirklees Council and education partners are delivering two new schools (Royds Hall and Crosland Moor) with a third at consultation stage.	Kirklees Council	Basic Grant Allowance Direct funding for Department for Education for Academies. S106	£unknown	Short term (0 -5 years).	No gap	Discussion with Kirklees Council Officers
E2	District Wide	Local Plan Modelling Education Needs	Essential	To understand in detail exactly what new school provision is required for proposed housing site allocations.	The Kirklees Council Education Team are working closely with the Kirklees Council Policy team to understand the exactly what schools need to be extended or new schools created to serve the proposed new homes in the Local Plan. This will then be fed into the emerging Local Plan.	Kirklees Council	Kirklees Council	£unknown	Short term (0 -5 years). Autumn 2015	No gap	Discussion with Kirklees Council Officers
E3	District Wide	Delivering the school places identified through the Local Plan Education Needs Modelling exercise.	Essential	To deliver the required school places.	The necessary new schools will then need to be delivered during the plan period.	Kirklees Council	Basic Grant Allowance. Direct funding for Department for Education for Academies. S106 / CIL	£unknown	Throughout plan period	Potential Gap, but funding sources available.	Discussion with Kirklees Council Officers

Figure 16.1: Infrastructure Delivery Programme

Ref	Location (Where)	Scheme	Essential / Desirable	Need for scheme (Why)	Requirements of scheme / comments	Lead delivery agency/ management organisation	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding	Baseline source
							Delivery by developers on Strategic Sites				
Health and Wellbeing											
H1	District Wide	Provision of additional GP provision	Essential	To meet GP need for proposed new site allocations.	The GPs surgeries will monitor take up of new patients on their GP register. Capitation funding is linked to the number of new patients and if required this funding will be used to fund new GP provision.	GP Practices in the North Kirklees and Greater Huddersfield CCGs.	Capitation Funding (registered patient funding)	£unknown	Throughout plan period	No gap	Discussion with CCGs
H2	Huddersfield	New Bradford Road Medical Centre	Essential	To deliver improved GP facilities.	This scheme seeks to provide a new GP premises to allow the Bradford Road Medical Centre to move out of an existing medical centre that is no longer fit for purpose.	Greater Huddersfield CCG.	Secured NHS Capital and revenue funding	£unknown	Short term (0 – 5 years)	No gap	Discussion with CCGs
H3	Huddersfield	Upgraded GP provision in Huddersfield Town Centre	Essential	To deliver improved GP facilities in Huddersfield Town Centre.	There is a recognised need to improve existing GP provision in Huddersfield Town Centre. The Greater Huddersfield CCG are considering options to consolidate and improve provision in the town centre.	Greater Huddersfield CCG.	Potential capital funding National Infrastructure Fund Revenue funding through efficiency savings.	£unknown	Short term (0 – 5 years)	Gap in funding, but NHS would need to provide.	Discussion with CCGs
Community and Cultural											
C1	District Wide	Review of Library provision to consider community transfers	Desirable	To deliver required efficiency and spending savings	Kirklees Council have recently consulted on the future provision of library services. The outcome of this consultation will inform the future direction of library provision. This is likely to involve transfer of some libraries to community groups. This has already occurred at some locations in the district.	Kirklees Council	Kirklees Council	£unknown	Short term (0 – 5 years)	No gap	Discussion with Kirklees Council Officers
C2	District Wide	Review of Community Facilities (community buildings) to consider community transfers	Desirable	To deliver required efficiency and spending savings	Kirklees Council plan to consult on provision of community services across the district. The outcome of this consultation will inform the future direction of community building provision. This is likely to involve transfer of some libraries to community groups. This has already occurred at some locations in the district.	Kirklees Council	Kirklees Council	£unknown	Short term (0 – 5 years)	No gap	Discussion with Kirklees Council Officers
C3	Huddersfield	The Grade II Market Hall on Queensgate requires improvements	Desirable	To carry out required improvements.	The Market Hall requires electrical and mechanical improvements to bring the building up to modern standards.	Kirklees Council	Kirklees Council	£10 million	Short term (0 – 5 years)	No gap	Discussion with Kirklees Council Officers
C4	Kirklees Rural	Create a visitor centre in Holmfirth to build on strong heritage of area.	Desirable	To build on a recognised tourist sector.	There is a Kirklees Council aspiration to deliver a visitor centre in Holmfirth. This would build on the existing visitor economy and strong heritage of this part of the district.	Kirklees Council	Kirklees Council	£unknown	Long term (10 – 15 years)	Gap in funding	Discussion with Kirklees Council Officers
C5	Huddersfield	Tolson Museum Structural upgrades	Desirable	To carry our required structural improvements.	The Tolson Museum has known structural issues and improvements are needed to meet modern standards.	Kirklees Council	Kirklees Council	£1.5m	Medium Term (5 – 10 years)	Gap in funding	Discussion with Kirklees Council Officers
C6	Huddersfield	Huddersfield Art Gallery Structural Upgrades	Desirable	To carry our required structural improvements	The Art Gallery is an early concrete and steel frame building and structural repairs are required.	Kirklees Council	Kirklees Council	£10m	Medium Term (5 – 10 years)	Gap in funding	Discussion with Kirklees Council Officers

Figure 16.1: Infrastructure Delivery Programme

Ref	Location (Where)	Scheme	Essential / Desirable	Need for scheme (Why)	Requirements of scheme / comments	Lead delivery agency/ management organisation	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding	Baseline source
C7	Huddersfield / Kirklees Rural	Castle Hill and Victoria Tower Refurbishment	Desirable	To refurbish the tower.	There has previously bids for Heritage Lottery Bids to refurbish the tower. However there is currently not funding secured.	Potential Heritage Lottery Fund	Kirklees Council	£1.5 m	Short Term (0 – 5 years)	Gap in funding	Discussion with Kirklees Council Officers
C8	Batley and Spen	Masterplan and future visitor strategy for Oakwell Hall.	Desirable	To understand future potential for Oakwell Hall.	Kirklees Council have commissioned consultants to conduct a costed masterplan for the Hall. This will identify improvements to the car park and future commercial opportunities to help the hall become more self -funding.	Kirklees Council	Private Developer Funds	£unknown	Short Term (0 – 5 years)	No gap.	Discussion with Kirklees Council Officers
C9	Batley and Spen	Delivery of the recommendations for the Oakwell Hall Masterplan	Desirable	To deliver recommendations from masterplanning work.	To deliver some or all of the proposed recommendations.	Kirklees Council	Heritage Lottery Funding Kirklees Council Funding	£unknown	Medium term (5 – 10 years)	Gap in Funding	Discussion with Kirklees Council Officers
Emergency Services											
E1	Batley / Spen	A new Police Station to serve Batley / Spen Sub area	Essential	To deliver efficient operating practices.	WYPS is currently being investigated by the West Yorkshire Police and could be achieved by the whole sub area being served from one of the existing stations (Batley or Heckmondwike) or a new site in the sub area.	West Yorkshire Police service	West Yorkshire Police Capital Budget	£unknown	Medium Term (5 -10 years)	No Gap	Discussion with WYPS
E2	District Wide	Potential to create additional fire stations (if monitoring indicates they are required)	Essential	To provide new facilities if required due to planned housing and employed growth.	WYFRS will monitor against their core indicators to confirm if new provision is required in future years.	West Yorkshire Fire and Rescue Service	Central Government Grant Business Rates Council Tax Other fees for licensing work.	£unknown	Medium Term (5 -10 years)	No Gap	Discussion with WYFRS
E3	District Wide	Delivery of the Hub and Spoke Model (if deemed necessary)	Essential	To deliver an improved operating model for YMS.	Three Hub and Spoke Model options are currently being consulted on by YMS. The outcome of this consultation will then determine the approach taken.	Yorkshire Ambulance Service	Department for Health funding.	£unknown	Medium Term (5-10 years)	No Gap	Discussion with YMS
Open Space and Green Infrastructure											
G1	Dewsbury & Mirfield	Expansion of Dewsbury Country Park	Desirable	To continue the development and growth of the new Dewsbury Country Park	Scheme received funding for delivery as a White Rose Forest and a Diamond Jubilee Woodland. Funding may be required to continue its expansion and delivery	Kirklees Council	Community Infrastructure Levy; Section 106	£unknown	Medium Term (5-10 years)	Gap	Discussion with Kirklees Council Officers
G2	Huddersfield / Kirklees Rural	Proposal to create a Country park at Farnley Tyas	Desirable	To provide new leisure and recreation opportunity south of Huddersfield	To provide a new country park in the Farnley Tyas area. Scheme would provide 1,500 acres of parkland. Scheme will be cross-subsidised by housing development.	Private Developer	Private Developer Funds	£unknown	Medium Term (5 – 10 years)	No gap.	Discussion with KIRKLEES COUNCIL Officers
G3	District Wide	Completion of Open Space Standards	Essential	Kirklees Council to apply revised open space standards across the district to establish areas recording a deficit	Kirklees Council has carried out a number of updates to its open space evidence base including revising its open space standards and updating its supply-side analysis. These updates will need to be applied by Kirklees Council so that a full understanding of where open space is in deficit can be established. The Open Space Strategy updates may identify a number of other schemes that are required.	Kirklees Council	Kirklees Council	£unknown	Short Term (0-5 years)	No Gap	Discussion with Kirklees Council Officers
G4	District Wide	Provision of new open space to rectify identified deficits	Essential	Kirklees Council to seek opportunities through new	The delivery of on-site or off-site small scale green infrastructure / sports contributions and strategic infrastructure need to be managed through S106 and	Kirklees Council	Community Infrastructure Levy; Section 106	£unknown	Continual delivery	Potential Gap (further work required)	Discussion with Kirklees Council Officers

Figure 16.1: Infrastructure Delivery Programme

Ref	Location (Where)	Scheme	Essential / Desirable	Need for scheme (Why)	Requirements of scheme / comments	Lead delivery agency/ management organisation	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding	Baseline source
				development to rectify existing deficits	potential CIL contributions. This will be investigated further through the feasibility work for the Community Infrastructure Levy. It is expected that large strategic sites will provide open space on site to contribute towards rectifying deficits.				throughout plan period		
G5	District Wide	Measures to improve quality of open space	Essential	To make quality improvements to open space stock, as outlined in Open Space Study and Demand Study	The Kirklees Open Space Study and associated demand assessment highlights deficiencies in quality across many sites districtwide. Funding required to make site specific improvements	Kirklees Council	Community Infrastructure Levy; Section 106	£unknown	Continual delivery throughout plan period	Potential Gap (further work required)	Discussion with Kirklees Council Officers
Sports, Leisure and Recreation											
S1	District Wide	Measures to implement recommendations of Playing Pitch Strategy	Essential	Playing Pitch Strategy identifies a number of issues with the existing stock of playing pitches. Implementing improvements will increase capacity and facilitate uptake of sports within the district	The Playing Pitch Strategy identifies a number of opportunities for improvements to be made to sports facilities across the district. Kirklees Council will need to seek opportunities to implement these recommendations	Kirklees Council	Community Infrastructure Levy; Section 106 Sports England	£unknown	Continual delivery throughout plan period	Gap in funding	Discussion with Kirklees Council Officers
S2	Dewsbury & Mirfield	New sports facilities adjacent to Dewsbury Rams site	Essential	Scheme	Committed scheme as part of a new development. Will help to address deficiencies in sporting provision.	Private developer	Private Developer Funds	£unknown	Short Term (0-5 years)	No Gap	Discussion with Kirklees Council Officers
S3	Kirklees Rural	Requirement to replace an existing swimming pool and sports complex at Spenborough.	Essential	Rebuild an existing sports centre	This building is no longer fit for purpose and the high maintenance cost mean that a rebuild will be required in the plan period.	Kirklees Council	Kirklees Council Funds	£10m	Medium Term (5 – 10 years)	Gap in Funding	Discussion with Kirklees Council Officers

17 Funding Sources

17.1 Overview

There are three categories of complementary infrastructure funding sources considered below:

- Grants and subsidies
- Local revenue generation
- Equity and debt

17.2 Grants and subsidies

17.2.1 West Yorkshire-Plus Transport Fund

In July 2014, the Government announced that Yorkshire Combined Authority (WYCA) has, uniquely, secured funding to establish a £1 billion West Yorkshire plus Transport Fund. The fund will be targeted at reducing congestion, improving the flow of freight and making it easier for people to commute to and from expected major growth areas.

The Fund will comprise £600m of Government funding government over 20 years, £183m of other devolved transport funding previously secured through the City Deal and local contributions. It will underpin growth by improving the City Region's roads and railways and connecting people to jobs and goods to markets seamlessly.

A previously drawn up package of transformational transport schemes which met the West Yorkshire Combined Authority and the LEP's aims of supporting economic growth is now being reviewed and refined in the light of the settlement. They will be evaluated against the Combined Authority's Single Appraisal Framework process to ensure their benefits and economic impacts are maximised soonest.

Kirklees have secured funding for a range of transport schemes through the WF+TF, as identified in the Infrastructure Delivery Programme (Table 16.1).

17.2.2 New Homes Bonus (NHB)

The New Homes Bonus provides local authorities with a financial payment equal to the national average for the council tax band on each additional property and paid for the following six years as a un-ring-fenced grant. Local authorities can utilise the income generated by the New Homes Bonus to pay for infrastructure requirements.

As an illustration of the potential NHB receipts, the grant relating to a mid-value council tax D property would be £1480 per annum.

The delivery of new homes bonus is dependent on housing delivery and net housing growth performance, to which there is inevitably a fair degree of risk.

However the future allocation of a portfolio of housing sites will increase the likelihood of securing funding through this source.

17.2.3 Government and European grants

Capital grants represent project specific funding for capital projects from Government, the EU or the National Lottery. Such funds could be received from quasigovernment sources such as HCA, Central Government Departments or other organisations, particularly the Department for Transport, Department for Health and Department for Education. The Train Operating Companies (TOCs) serving the district also provide a means of funding.

The current financial climate has led to a dramatic drop in grant funding available, however, there remain some sources of funding that can potentially be drawn into infrastructure schemes, such as the funding from the Heritage Lottery, Sports England and the European Regional Development Fund (ERDF) and it is reasonable to assume that there will be a continuation in the availability of project specific grants in the future.

17.3 Local Revenue generation opportunities

17.3.1 Community Infrastructure Levy

The development of a Community Infrastructure Levy for Kirklees would allow developer contributions to be pooled and spent a large projects in the district. Kirklees Council are progressing a Community Infrastructure Levy alongside their emerging Local Plan. This will be supplemented with S106 agreements for delivery of on-site infrastructure and affordable housing.

17.3.2 Business rate retention

The wider Leeds City Region have progressed a number of business rate retention schemes including the Aire Valley Enterprise Zone and Bradford's City Centre Growth Zone. This approach could be considered by Kirklees Council to create a fund for future investment in a town centre location or business park.

17.3.3 Proceeds from the disposal of assets

Proceeds from the disposal of surplus Council and other public sector owned assets form a further source of funding that can potentially be used to pay for infrastructure works. Kirklees Council owns a significant amount of land, some of which it is anticipated will be available for release for development over the period of the development plan. However, it should be recognised that the utilisation of capital receipts for infrastructure investment purposes will be subject to internal assessment in the same way as any other investment proposal and that there will need to be strong business case in respect of contributing to the Council's corporate objectives and priorities.

Kirklees are already seeking to transfer community centres and libraries to the management community groups to reduce Council costs. This is a disposal of sorts as it reduces future costs to the Council.

17.4 Equity and debt

17.4.1 Joint ventures

The use of a partnership approach to develop a pipeline of sites across an area is a popular potential route that is being pursued by a number of local authorities at present. Such partnerships can include the public sector vesting land and/or equity alongside an equivalent commitment by a commercial partner to deliver a development or regeneration scheme.

The development of an infrastructure based JV has potential where the public sector owns development land and is able to use that land to attract private sector investment to deliver infrastructure. In this case, the private sector would put equity into the JV to pay for infrastructure works, then development takes place on the Council's land, the receipts from which are shared between the parties.

The potential for such mechanisms to be applied on an ad hoc or area wide strategic basis should be explored alongside the audit of assets recommended above.

17.4.2 Shadow toll

The Shadow Toll mechanism is one that has been used extensively across Europe and has been the subject of recent debate in connection with the proposals for increasing institutional funding in infrastructure. Historically this has been delivered through a PFI type structure where the system of shadow tolling provides the revenue for privately-funded road schemes for a Design, Build, Finance and Operate (DBFO) contract. The mechanism allows the Government to spread payments for infrastructure over a longer period of use rather than up front for development, with much of the development risk being taken by a private sector partner. The advantages of this scheme are that it enables the private sector to meet the upfront capital funding requirements and share the risks. It may therefore offer an opportunity for funding waste schemes in Kirklees with partnership with neighbouring local authorities.

18 Conclusion and Recommendations

18.1 Overall Conclusion

The conclusion from this study is that there is broadly sufficient infrastructure, either current or planned, to support the housing and economic growth aspirations for the Kirklees district up to 2031. As such, the current evidence shows that the strategy set out in the emerging Local Plan is broadly deliverable.

However, there are uncertainties associated with the planning and delivery of some infrastructure. There are also some gaps in the ability for committed or allocated funding to deliver the necessary level of infrastructure.

Specific risks include:

- carry out further detailed analysis on open space standards to understand the where there are existing deficits that can be overcome by on-site provision or the use of CIL.
- carry out further detailed analysis on education requirements to understand exactly where new provision should be focused to inform provision on Strategic Sites or extensions of existing schools.
- to work closely with the Environment Agency to prioritise funding for flood alleviation schemes across district.

Across these areas of risk, decisions will need to be made on priorities for infrastructure delivery. These decisions must factor in the timing and phasing of housing and economic development and also infrastructure investment cycles. Across certain infrastructure types, Kirklees will also need to consider a range of potential options and solutions to reflect uncertainties in delivery funding and investment.

18.2 Infrastructure-Specific Conclusions

The following section details the specific conclusions in relation to each infrastructure type:

Transport: There are a number of existing highway and rail capacity issues in the district. However the committed transport schemes alongside necessary highway improvements by developers will provide the necessary capacity to allow the planned housing and employment in the district to be delivered. The majority of the required transport infrastructure is funded, or partly funded. There is a small gap in transport funding, which is likely to be filled by CIL or other on site developer improvements.

Utilities: There is broadly adequate electricity, gas and water supply / treatment capacity to serve the proposed growth levels. Developers will be required to pay for local connections as per normal associated development costs. A requirement to extend the existing 33kV NPG network may be required in Kirklees Rural and Batley and Spen, as there is less of a presence of a network in these areas. In addition upgrades to the substations around the Land north of Bradley Road,

Bradley Strategic Site to support the development, including Brighthouse 11kV, Deighton and Emerald Street. This would need to be funded by developers in partnership with Northern Powergrid. There is therefore no gap in funding for utility provision.

Waste Management: The impact of the planned Local Plan growth on waste facilities is well understood. There is need for additional Energy from Waste capacity, two new Material Recover Facilities (MRFs) and additional landfill capacity. However Kirklees have clear strategy to deliver the required additional facilities. There is therefore no gap in funding of waste management infrastructure.

Telecoms: The broadband services are generally good in most areas in the district. Where there are weaker services in rural areas the BDUK phase 2 rollout will improve services. The strategic developments could engage early with broadband operators to facilitate best possible services. Mobile services are generally good in most areas, and attention should be focused on encouraging the operators to deploy 4G services in more rural areas. Each individual developer will be responsible for securing telecoms services suitable for their own proposed development site. There is therefore no gap in telecoms funding.

Flood Risk and Drainage: As identified in the flood risk evidence base including the Local Flood Risk Strategy part of the Kirklees district are at risk of flooding from fluvial and surface water sources. The Council are seeking to prioritise schemes to tackle these issues. There are a large number of proposed flood alleviation schemes in the Kirklees district, which are being promoted by Kirklees Council and the Environment Agency. The exact funding of the flood alleviation schemes is not yet confirmed. However Kirklees are seeking to make the case for 85% of the total cost of each scheme to be secured from Environment Agency Grant and Aid, with 15% partnership funding from other sources. The use of European Structural Funds is also being investigated. Kirklees Council have got the processes and structure in place to deliver their Sustainable Drainage responsibilities and have produced guidance for developers on what is expected.

The Kirklees Council Drainage team are working closely with the Local Plan team; including commenting on all proposed site allocations to focus towards sites where the flood risk is lowest. Kirklees Council are currently producing an updated Strategic Flood Risk Assessment to support the emerging Local Plan.

The appraisal process to develop flood alleviation schemes will require initial feasibility studies which could be funded through the EA's Grant in Aid programme. Costed options will be produced and if cost benefit appraisal of the options is favourable, bids will be submitted for further Grant in Aid funding. Programming of the Kirklees projects in the EA programme will be adjusted as feasibility studies are produced and implementation programmes are developed.

Education: There are a number of capacity issues facing the various different areas within Kirklees, with a number of schools being oversubscribed whilst others within the district are noted to have unused capacity. This is further complicated by the fact that 'parental preference' often dictates the school that a child may attend, often not necessarily the school in closest proximity.

Notwithstanding unused capacity in some areas it is acknowledged that in order to realise the growth within the district that the Local Plan is aiming to achieve, there will be a gap in provision that will need to be addressed.

Kirklees Council are currently evaluating the need to include new schools across a range of their strategic sites. Further work is necessary to understand fully whether these sites will be needed. Should they be deemed to be a firm requirement it is possible in some instances that they will be delivered by the site's developer. The exact gap in education provision will only be known following detailed capacity work by Kirklees Council. Following this work funding streams will need to be identified to support the delivery of additional new schools within the district. They are likely to be Basic Needs Allowance, CIL and on-site school provision on strategic sites.

Health and Well Being: Health services in Kirklees are delivered by the North Kirklees Clinical Commissioning Group (CCG) and the Greater Huddersfield CCG. Through discussion with the CCGs and Kirklees Council Public Health officers it has been confirmed that both CCGs are working towards rationalisation of GP and hospital provision and new ways of working more efficiently. Health issues have been factored into site allocation processes through a Rapid Health Impact Assessment Planning Tool.

The planned new residential development in Kirklees may result in a requirement for new GP provision. The funding for GP provision is based on the number of patients registered at the practice, called capitation funding. This weighted with more funding based on levels of deprivation and aging population. Therefore additional patients mean additional funding that can be used to provide additional GP provision and the GP surgery would make this investment in a new GP. The existing hospital provision is adequate to meet planned housing and employment levels. There are no funding gaps in health care provision.

Community and Cultural: The Kirklees Council asset management team are currently reviewing the level of community facilities across Kirklees, including options to transfer assets to community groups. This will not be completed in time to feed into this study, but will be fed into future iterations. There are a number of existing maintenance issues with community and cultural facilities, which currently do not have identified funding sources. Discussions with Kirklees Council officers has indicated that there is not deemed to be a shortage in provision of community and cultural facilities. Based on the availability of Council owned and community run / privately run assets it is considered that adequately facilities are available. It may be appropriate for the large strategic sites to provide community facilities. This would be developed through masterplan work on the Strategic Sites. Whilst there are existing funding gaps related to maintenance of community and cultural assets there are no funding gaps in new provision required to meet the needs of new homes in the district.

Emergency Services: All three emergency service operators are investigating models of working to allow them to deliver services more efficiently. The use of emergency service provision will be monitored by the fire, police and ambulance services based on their quality indicators (e.g. response times). If response times

are not being met then the operators will seek to move resources to allow targets to be met. There is therefore no gap in funding for emergency service provision.

Open Space and Green Infrastructure: The assessment of open space is broadly broken down into the three areas of quantity, quality and accessibility. The provision of open space against these three assessment areas varies considerably across the district. There are some areas that score poorly against these individual criteria, however the proposed quantum of growth set out in the Kirklees Council Local Plan will potentially provide a mechanism by which Kirklees Council can begin to rectify these deficits. The Council is working to confirm the exact gap in open space provision based on new standards and will then seek to deliver open space where required through on site provision and / or the use of CIL. There is potentially a gap in the funding of open space provision, however further work needs to be carried out by Kirklees Council to confirm this.

Sports, Leisure and Recreation: The district experiences a shortage of sport provision in terms of quantity, with several facilities suffering from overplaying. This could be rectified through the delivery of new facilities or in part through a different approach to management on a site by site basis. There are numerous quality issues noted at various sites across the full extent of the district. There has been an increase in provision in recent years and Kirklees Council will seek to deliver new facilities through both the Local Plan and wider community investment (e.g. bids for Sport England funding). There is however an identified gap in the funding of sports, leisure and recreation provision.

Appendix A

Infrastructure Stakeholders

A1 Infrastructure Stakeholders

Infrastructure Type	Key Contact	Organisation
Transport	Tim Lawrence	Kirklees Council Transport Policy
Utilities	Michael Walbank,	Northern Powergrid
	Diane Watson and Micah Boutwood,	Northern Gas Network
	Stephanie Walden,	Yorkshire Water
Waste Management	James Barker	Kirklees Council Policy Team
Telecoms	Steve Moore	Kirklees Council
Flood Risk and Drainage	Steven Wright	Kirklees Council Policy Team
	Tom Ghee	Kirklees Council Flood Management
	Paul Farndale	Kirklees Council Flood Management
Education	Jo-anne Sanders	Kirklees Council Education Team
Health and Wellbeing	Mercy Vergis	Kirklees Public Health
	Alison Milbourn	Kirklees Public Health
	Jan Giles	Greater Huddersfield Clinical Commissioning Group
	Jackie Holdich	North Kirklees Clinical Commissioning Group
Community & Cultural	Richard Butterfield	Kirklees Council Museums and Galleries
	Carol Stump	Kirklees Council Libraries and Information Centres
Emergency Services	Ged McManus	West Yorkshire Police
	Martin Langan	West Yorkshire Fire & Rescue
	Jonathan Isles	Dacres Commercial (on behalf of Yorkshire Ambulance Service)
Open Space and Green Infrastructure	Andrea Lane	Kirklees Council Policy Team
Sports, Leisure and Recreation	Andrea Lane	Kirklees Council Policy Team

Kirklees Council Assets	Mark Gregory	Kirklees Council Corporate Landlord
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Appendix B

Development Quantum

Table B.1: Quantum of Housing Growth assessed

Area	Sub town	Assessed in IDP Dwellings	Draft Local Plan Total Floor space sqm
Batley & Spen	Liversedge	74	3,180
	Heckmondwike	319	
	Gomersal	133	
	Cleckheaton	1274	
	Birstall	376	
	Birkenshaw	308	
	Strategic Site: Land East of Leeds Road, Shaw Cross, Dewsbury (mixed use).	1000	1,535 ²³ dwellings over the plan period and 122,500 sqm of employment.
Batley and Spen Subtotal		3217	4715
Dewsbury and Mirfield	Strategic Site: Land south of Ravensthorpe Road, Thornhill Lees, Dewsbury (housing).	2500	2,310 dwellings in plan period and 1,690 beyond.
	Thornhill	34	838
	Ravensthorpe	28	
	Mirfield	332	
	Grange Moor	42	
	Dewsbury	399	
Dewsbury and Mirfield Subtotal		4335	3148
Huddersfield	Netherton	358	4778
	Lepton	272	
	Kirkheaton	198	
	Huddersfield	3810	
	Strategic Sites: Land north of Bradley Road, Bradley, Huddersfield (housing).	1974	1,680 dwellings in plan period with 294 beyond
	Strategic Sites: Land north of Blackmoorfoot Road, Crosland Moor, Huddersfield (mixed use).	435	438 dwellings in plan period and 51,170 sqm of employment.
	Huddersfield Subtotal		7047
Kirklees Rural Subtotal		4386	5,148
To be split across all areas			26
Total		18,985	19,933

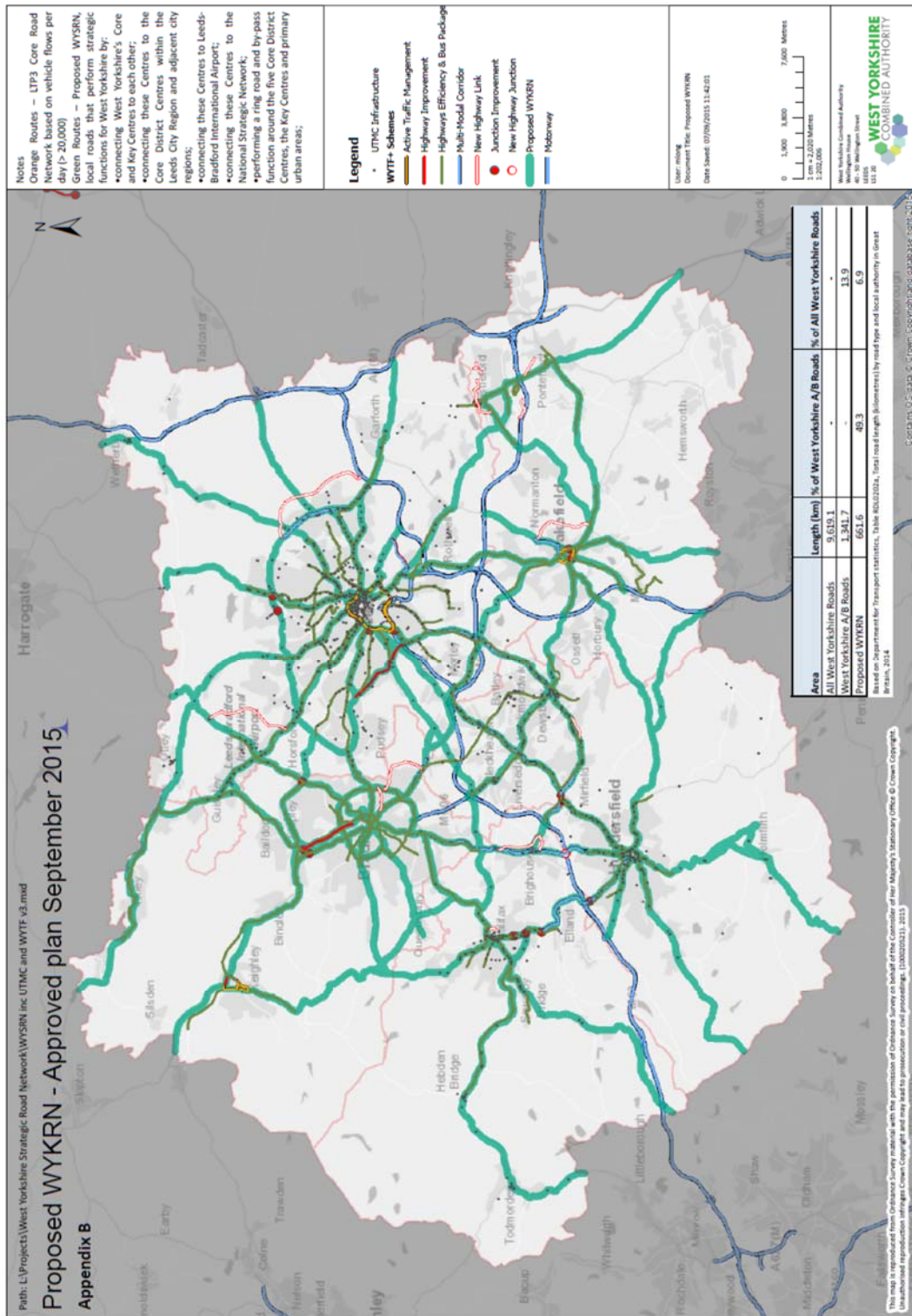
Table B.2: Quantum of Employment Land Assessed

Area	Subtown	Use	Assessed in IDP Total Floor space sqm	Draft Local Plan Total Floor space sqm
Batley & Spen	Heckmondwike	Strategic Employment Site: Land at Cooper Bridge	21,404	161,185 ³³
	Cleckheaton	Employment	5306	NA
		Strategic Employment Site: Land off A58 Whitehall Road, Cleckheaton	73,875	41,020
		Strategic Employment Site: Former North Brierley Former Waste Water Treatment Works, Cliff Hollinms Lane, Cleckheaton	80,697	49,000
	Birstall	Employment	39,195	NA
	Birkenshaw	Employment	23126	NA
	Non- strategic employment site total			NA
Dewsbury & Mirfield	Dewsbury	Employment	22,783	28,322
	Mirfield	Employment	163,368	
Huddersfield	Huddersfield	Employment	102,432	188,709
Kirklees Rural	Meltham	Employment	16495	NA
	Honley/Brockholes	Employment	15,403	NA
	Holmfirth	Employment	11,037	NA
	Clayton West/Scissett	Strategic Employment Site: Land at Wakefield Road and Kiln Lane, Clayton West, Huddersfield	90,845	55,196
	Kirklees Rural Non- strategic employment site total			
Total			665,518	710,128

³³ Arup began utility analysis and infrastructure discussions in July. Since then the quantum of development to be included in the emerging Local Plan has increased. There has been a significant increase on this site since the IDP was drafted. Master planning for this site is ongoing and further assessment will be made in relation to infrastructure requirements will be carried out to inform the next iteration of the Local Plan.

Appendix C

West Yorkshire Key Route Network



Appendix D

Core Walking and Cycling Network

