Autumn 2012

Infrastructure Delivery Plan

CALDERDALE LOCAL PLAN

EVERYONE DIFFERENT EVERYONE MATTERS

Calderdale Council

Contents

1 Purpose of this document

1.1 Calderdale is changing. New development is going to happen and there will be new housing, employment, retailing and facilities to fulfil our current and future needs. It is important that this process of change and development is managed to ensure it fulfils local needs, requirements and aspirations. As part of this management Calderdale Council is preparing a new Local Plan for the district, formerly known as the Local Development Framework. The Local Plan will set out the quantity, type, location and timing of new development to facilitate the creation of "sustainable communities".

1.2 To ensure we achieve truly sustainable communities and development it is crucial that the correct physical, social and environmental infrastructure is provided so we can meet the needs of our current and future residents, businesses and visitors. This report has been prepared to assess the existing conditions and challenges affecting Calderdale's infrastructure and identify where there may be infrastructure shortfalls which we can plan to meet.

1.3 The purpose of this document is to set out baseline information on existing infrastructure provision in Calderdale and identify the requirements for new infrastructure in the district. This information has been identified through analysis of infrastructure investment plans and discussions with relevant providers.

1.4 The Infrastructure Delivery Plan (IDP) is a key component of the Local Plan evidence base. It will support the Core Strategy to ensure that the approaches to development are sustainable and deliverable. This is important so that a place can function in a sustainable way and ensure infrastructure needs are considered alongside other requirements.

1.5 This document will continue to be updated as the Core Strategy progresses and new information upon infrastructure becomes available.

2 Policy context

National policy

2.1 The need to adequately plan for infrastructure is set out within national, regional and local government policy and guidance. The national policy context clearly sets out the importance of planning and delivering infrastructure within local areas through the development plan process. This includes increasing powers for taking decisions at the local level. Some of the key documents include;

The Coalition: Our Programme for Government (May 2010)

2.2 Provides the coalition's agreed approach for its key policy areas. A central theme is a fundamental decentralisation of power from Westminster and increased local community engagement and power, including the promotion of greater financial autonomy to local government and community groups. This process includes a review of local government finance which is beginning to have implications for the delivery of infrastructure.

The Localism Act (November 2011)

2.3 Covers the Coalition Government's proposals for a wide range of planning and related legislation. The main elements of the act include:

- abolition of Regional Spatial Strategies;
- returning decision-making powers on housing and planning to local councils;
- abolition the Infrastructure Planning Commission and replace it with a democratically accountable system to provide a fast-track process for major infrastructure projects;
- providing new powers to help save local facilities and services threatened with closure, and give communities the right to bid to take over local state-run services; and
- creating new trusts that would make it simpler for communities to provide homes for local people.

2.4 This Act signifies major change for the organisation of the planning system, with more power given to councils, neighbourhoods and communities.

National Planning Policy Framework (March 2012)

2.5 This National Planning Policy Framework (NPPF) articulates government policies in relation to planning. At the heart of the NPPF is the presumption in favour of sustainable development which should run through both plan making and decision taking. It indicates Local Plans should provide a 15 year policy basis, strategic priorities, broad development locations on a key diagram and land-use designations on a proposals map. There is also a strong emphasis on viability and deliverability.

2.6 In terms of infrastructure the NPPF states local authorities should set out their strategic priorities to deliver infrastructure provision and work alongside other authorities and providers to assess and meet forecast demands for transport, water, energy, telecoms, utilities, health and social care, waste and flood defences.

Regional policy

2.7 Regionally the importance of infrastructure planning is recognised through many plans and strategies including;

The Yorkshire and Humber Plan: Regional Spatial Strategy (RSS) to 2026

2.8 Pending formal revocation of the RSS, the courts have found that decision-takers can take account of the proposed abolition of RSS in their deliberations on development proposals (planning

applications), but that it would be unlawful for any Council to have regard to the proposed revocation in drawing up their development plans. As a result Calderdale is required to prepare a development plan that is in general conformity with the existing RSS. Once the RSS has been revoked however the NPPF requires that development plans must be drawn up to meet objectively assessed needs and the Duty to Cooperate at the strategic level. Calderdale Council has been developing evidence surrounding the housing and employment requirements previously set by RSS as part of the understanding of objectively assessed needs, and is cooperating with other Council's particularly in the Leeds City Region to understand strategic planning needs across a wider than local spatial level The RSS notes the importance of the various infrastructure types to the sustainable development of the region and its component city regions.

Leeds City Region (LCR)

2.9 The Leeds City Region Partnership (LCR) is a partnership between 11 local authorities, which have functional economic links around Leeds. As part of the process of creating of an integrated Regional Strategy, LCR had commenced work on a city region strand for the wider Yorkshire and Humber Strategy that was being prepared by the Yorkshire and Humber Joint Board. This Yorkshire and Humber Joint Board was dissolved and its strategy work ceased following the general election in 2010. However the City Region Partnership decided that it was important to continue work across the city region on a strategy and investment plan that would bring greater coherence to policy and investment activities of the City Region Partnership and would support the development of the City Region Local Enterprise Partnership. The development of the interim strategy statement for spatial planning was seen as part of this wider strategy development activity. This work is now seen as an important element of implementing the Duty to Cooperate that was introduced by the Localism Act 2011.

2.10 The 10 Local Planning Authorities in the LCR that are preparing Core Strategies (North Yorkshire County Council the eleventh local authority in the LCR is a planning authority in respect of minerals and waste only) have all used the RSS as a start point for their Core Strategies and sign up to urban transformation ambition that is at the core of the RSS. Where there are adopted Core Strategies (Harrogate and Wakefield) those documents have a strong policy relationship with the RSS. Core Strategies at an advanced stage (Leeds, Bradford, Kirklees and Selby) generally have taken RSS as the initial starting point, but then taken account of potential changes in evidence to develop amended approaches. All authorities however, recognise that the policies in the former RSS which articulate that urban transformation ambition, should provide the start point for an interim strategy statement. Along with policies that safeguard the environmental assets of the city region and the key spatial investment priorities that are set out in the already agreed city region strategies.

Local policy

2.11 The Core Strategy will provide the spatial direction for Calderdale and must integrate with other national and regional plans and programmes that influence infrastructure including strategies for transport, health, education, sport and the environmental infrastructure. This IDP provides a framework within which detailed infrastructure projects can be identified and prepared at a local level.

2.12 To satisfy the requirements of the NPPF, and produce a sound Core Strategy the IDP has to exist as part of the Local Plan evidence base and inform the process of its creation. The IDP also has a second role to corporately influence both public and private infrastructure investment within Calderdale, and inform any charging schedule developed as part of the Community Infrastructure Levy (CIL), on new development.

3 Key assumptions

3.1 This section looks at the key assumptions made whilst compiling the evidence for this document.

What is infrastructure?

3.2 The term infrastructure can be given to physical aspects such as roads, railways and utilities but it can also apply to both environmental and social facilities. Whilst government guidance uses the terms 'physical', 'social' and 'green' infrastructure, these are not defined by them. Section 216 of the Town and Country Planning Act 2008 makes it clear that funds secured in the future by any Community Infrastructure Levy must be used for infrastructure purposes. In doing so it states that 'infrastructure' legally includes;

- Flood defence;
- Open space;
- Recreation and sport;
- Roads and transport facilities;
- Education and health facilities;

3.3 Affordable housing is not included in this legal definition and it appears likely this will continue to be the case in the short term. It should also be noted that because the act is written in terms of the 'legal definition includes' this means that the list is not exhaustive and infrastructure could feasibly include anything which benefits the area.

3.4 The term infrastructure can therefore cover a broad range of services, facilities and features. For the purpose of this document 'infrastructure' has been taken as relating to tangible facilities and the physical provision that is needed to enable publicly funded services to be provided (e.g. roads, railway tracks, sewage works,transmission pipes/cables, buildings and open spaces). These tangible facilities have then been sub-divided into physical, social and green infrastructure. This definition is used to group similar categories as set out below. The categories listed in the table have been selected to prioritise the infrastructure needed to support the development set out in the Core Strategy.

Table 3.1 Infrastructure categories

Type	Sub-category	Responsible body
Physical infrastructure		
Transport	Strategic road network	Highways Agency
	Local road network	Calderdale MBC
	Rail network	Network Rail
	Bus network	WYPTE (Metro)
	Walking/Cycling	Calderdale MBC/ Sustrans
Utilities	Sewage/ Waste water/ Water	Yorkshire Water
	Gas	Northern Gas Networks
	Electricity	CE Electric/ YEDL
	Telecommunications	Numerous

Type	Sub-category	Responsible body
Waste Management	Municipal waste/ Waste Collection/ Recycling	Calderdale MBC/ Environment Agency
Flooding	Flood defences	Environment Agency
	Water quality	Environment Agency/ Calderdale MBC/ Yorkshire Water
	Drainage	Calderdale MBC/ Yorkshire Water
Social infrastructure		
Education	Nursery/ Pre-school/ Sure-start	Calderdale MBC
	Primary school	Calderdale MBC
	Secondary school	Calderdale MBC
	Higher education	Calderdale College
	Adult learning	Calderdale MBC
Health	GP surgeries / Health centres	NHS Calderdale
	Hospitals	Calderdale & Huddersfield NHS Foundation Trust
	Dental practises	NHS Calderdale
Community and Culture	Community centres	Various
	Post offices	Post Office
	Libraries/ Customer 1st/ Information centres	Calderdale MBC
	Town Halls	Calderdale MBC/ Others
	Museums/ Galleries/ Theatres/ Cinemas	Calderdale MBC/ Others
	Heritage Assets	English Heritage/ Calderdale MBC/ Others
Emergency Services	Police	West Yorkshire Police
	Fire and Rescue	West Yorkshire Fire and Rescue
	Ambulance	West Yorkshire Ambulance Service
Green infrastructure		
Open Spaces and Natural Environment	Parks and gardens	Calderdale MBC/ Others
	Allotments/ community gardens	Calderdale MBC/ Others
	Common land	Calderdale MBC/ Others
	Amenity land	Calderdale MBC/ Others

Type	Sub-category	Responsible body
	Cemeteries/ Churchyards/ Other burial grounds	Calderdale MBC/ Others
	Civic spaces	Calderdale MBC/ Others
	River/ Canal	Environment Agency/ British Waterways/ Others
	Sites of wildlife/ habitat significance	English Heritage/ Calderdale MBC/ Others
Sport, Leisure and Recreation	Play areas	Calderdale MBC/ Others
	Sports pitches	Calderdale MBC/ Sport England/ Others
	Sports centres/ swimming pools	Calderdale MBC/ Sport England/ Others
	Outdoor sports facilities (Tennis, Bowling greens, Golf courses)	Calderdale MBC/ Sport England/ Others

Growth assumptions

3.5 The overall pattern and scale of growth proposed for the district until 2029 are set out within the Core Strategy Preferred Spatial Option.

Distribution of growth

3.6 The general principles of the spatial option are around delivering growth in eastern Calderdale whilst supporting the economy and places in the west. The implications of this for the towns and villages of Calderdale are;

- **Halifax** will be the prime focus for housing, employment, shopping, leisure, education, health and cultural activities/ facilities. It will provide excellent transport connections to Leeds, Manchester, Bradford, Huddersfield and other towns and cities of national/ regional importance.
- **Brighouse** will be a main local focus for housing, employment, shopping,leisure, education, health and cultural activities/ facilities. It will provide good transport links with Leeds, Manchester, Bradford, Huddersfield, Halifax and other towns and cities of national/ regional importance.
- **Elland**, **Sowerby Bridge**,**Todmorden** and **Hebden Bridge** will provide housing, employment, shopping (including improvements to markets), leisure, education, health and cultural activities/ facilities that serve the needs of, and are accessible to, residents of the town and surrounding lower order settlements. Employment of district wide significance will be provided at **Elland** to make the most of its strategic location. The towns will provide good transport links to Leeds, Manchester and Halifax and other towns and cities of regional importance
- **Southowram**, **Holywell Green& Stainland**, **Ripponden & Rishworth**, **Luddenden & Luddendenfoot**, and **Mytholmroyd** will provide locally generated needs for housing, employment, shopping, leisure, education, health and cultural activities/ facilities which cannot be accommodated in higher order settlements. **Northowram** and **Shelf** will see enhanced rates of housing growth to account for their strategic location between Halifax and Bradford.
- Limited development will occur in other settlements.

Scale of growth

3.7 Based upon the evidence collected for the Local Plan the Core Strategy Preferred Option identifies the development requirements for the district up to 2029. The types of development considered within

the Preferred Option are jobs, retail and town centres and housing. These three areas are discussed as they require the greatest land designations within Calderdale. It is, however, important to note that just because a form of development is not discussed it does not mean there is no requirement.

Jobs

3.8 The Local Plan is planning for an average annual increase of 526 new jobs per year over the plan period. This has been revised down from the RSS indicative target of 610 new jobs per year due to the current economic climate. These rates of job creation, together with the restructuring of the economy, would create a need for the following 'B' Class Uses net and gross floorspace requirements between 2009 and 2029.

3.9 The figures contained below have been rounded.

Table 3.2 Employment Floorspace Requirements to 2029 (sq.m)

Type of floorspace	Net	Gross
Office	86,500	**98,000**
Industry/ warehousing	107,500	**215,000**

3.10 Findings from the ELR indicate there is potentially an adequate 'pool' of employment sites within the district to fulfil this demand. It is important to note that some of the sites in this 'pool' are new sites submitted by landowners, developers or other interested parties which the Council has not given any commitment or support to at this stage. The majority of the potential supply appears to be within Halifax, Brighouse and Elland with significant developments currently taking place in Sowerby Bridge. It is therefore anticipated that the majority of the employment growth within Calderdale will take place within these areas.

Retail and town centres

3.11 The Calderdale Retail Needs Assessment (RNA) was published in 2009 and included the forecast need for new retail floorspace in the six main town centres in Calderdale. Need was identified for both convenience shopping (every day essential items including food and drink) and comparison shopping (items not obtained on a frequent basis such as clothing and household goods).

3.12 In terms of expenditure, the Calderdale Retail Needs Assessment (published in 2009) estimated that £696m was spent in retail premises in 2009. However the study identified significant leakage of expenditure outside the district, with many of Calderdale's residents shopping at destinations such as Leeds, Huddersfield and Bradford. The decline of some of Calderdale's town centres in the retail rankings reflects this trend. The need for additional retail floorspace in many of Calderdale's town centres was identified within this study, and the increase in investment and jobs by meeting these needs should help to reverse this trend.

3.13 The Core Strategy Preferred Options identifies that sufficient land and premises will be sought within town centres to accommodate the anticipated need for between 9,000sqm - 22,000sqm of new convenience goods floorspace to 2026, and between 32,000sqm - 54,000sqm of new comparison goods floorspace, across the district.

Housing

3.14 The housing market and housing demand are closely linked to the functioning of the economy. It is therefore important that Calderdale provides sufficient housing supply to meet demand driven by its economy in order to maximise productivity, support wealth generation for its residents and avoid leakage of returns and expenditure generated locally by business and households outside the district.

3.15 The Council's preferred approach proposes a total housing requirement figure of 16,800 or 800 dwellings per annum between 2008 and 2029. This is higher that the RSS requirement of 670 new dwellings per annum but previously the RSS figure plus a figure for New Growth Point status within Calderdale amounted to a combined housing requirement figure of 804 dwellings. In this context the proposed figure of 800 dwellings per annum relates well to past levels of delivery. Some of this requirement will be made up of current planning permissions or recent completions.

Implications for our Places

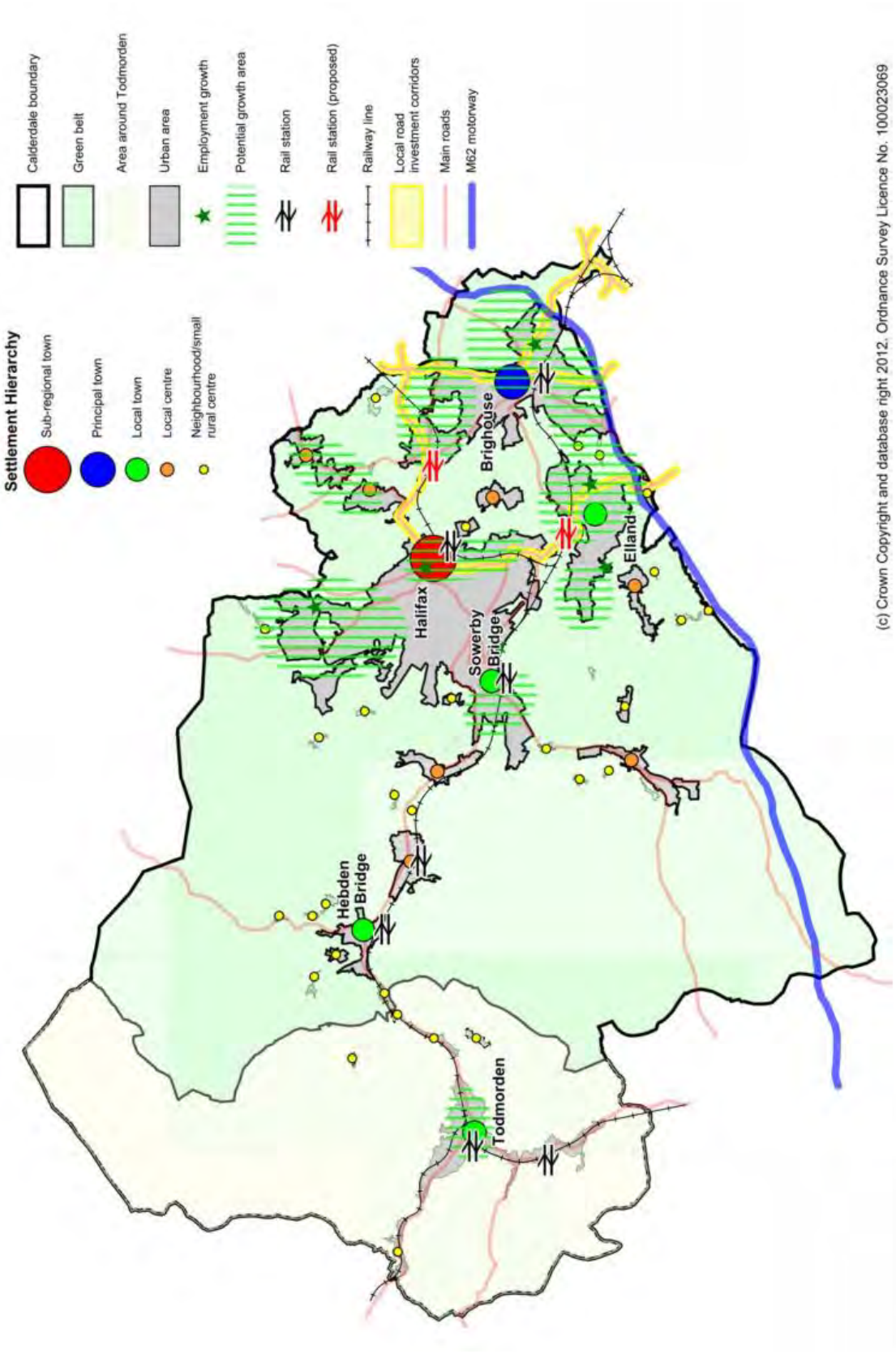
3.16 Based upon the above requirements the anticipated growth for each area is set out in the table below;

Table 3.3 Growth implications for Calderdale settlements

Settlement	Office floorspace (sqm)	Industry/ warehousing floorspace (sqm)	Convenience retail floorspace (sqm)	Comparison retail floorspace (sqm)	Housing (max number)
Halifax	45,000	85,000	5,500 - 13,000	25,000 - 40,000	5,030
Brighouse	35,000	40,000	1,500 - 3,500	2,500 - 4,000	2,100
Elland	8,000	50,000	-	750 - 1,250	1,050
Todmorden	2,000	3,000	300 - 700	1,100 - 1,900	630
Sowerby Bridge	1,000	9,000	-	250 - 400	840
Hebden Bridge	1,000	500	800 - 1,900	1,500 - 2,500	252
Mytholmroyd & Luddenden Foot	100	10,000	-	-	158
Ripponden/ Rishworth	200	1,000	-	-	46
Holywell Green & Stainland	2,000	100	-	-	17
Southowram	100	-	-	-	12
Northowram & Shelf	100	-	-	-	368
Other settlements*	4,000	-	-	-	-

* combined total for all other settlements

3.17 These levels of growth will inevitably have an impact upon the existing infrastructure within Calderdale. To fully understand the infrastructure implications of the Preferred Spatial Option this initial draft of the IDP considers current shortfalls in infrastructure provision including; 'show-stopper' issues for development, and future investment plans of the infrastructure providers. The second stage of development of the IDP will be to discuss the full implications of the growth proposals and identify the infrastructure necessary to ensure development proposals add to the creation of sustainable communities. The Core Strategy Key Diagram identifies areas within the above settlements where major growth could occur.



Map 3.1 Core Strategy Key Diagram

4 Physical infrastructure

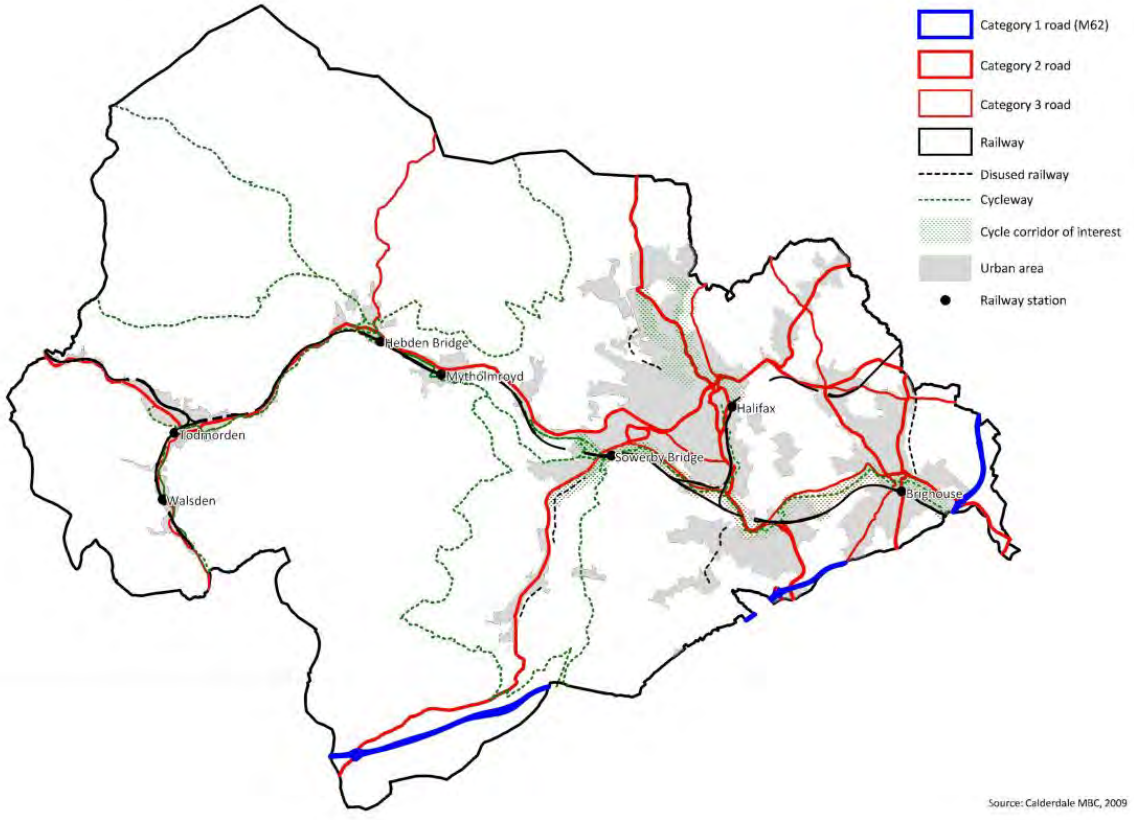
4.1 Physical infrastructure is the 'hard infrastructure' required to make a place or site function. It includes roads, flood defences, utilities and public transport.

Transport

Introduction

4.2 Calderdale is located mid way between two major cities, Leeds and Manchester and is connected by road and rail to both of these cities and their wider city regions. The district is served by the M62 running east to west along its southern boundary, a local road network providing links across Calderdale and to neighbouring towns and cities as well as the Calder Valley line which provides services to Leeds, Manchester and beyond. In addition Calderdale is served by a comprehensive bus network linking the main towns with smaller towns and villages as well as a developing network of cycle ways and footpaths.

Map 4.1 Transport within Calderdale



4.3 The topography in Calderdale, whilst providing distinct natural beauty, limits and constrains the expansion of the transport network. The main challenge for Calderdale is therefore to get the most out of the current network as well as identifying and seizing new opportunities. A lot can still be achieved through public transport interventions. This is indicated by the fact that in 2010 over 72% of journeys into Halifax were made by car and 77% of those are single occupancy.

4.4 Traffic congestion regularly occurs within the district with peak period problems encountered on the M62 in the east-bound direction from Junction 24 (A629, Ainley Top) in the AM peak and from Junction 25 (A644, Brighouse) through to Junction 27 (M621/A62, Gildersome) in the PM peak. In the west-bound direction traffic congestion regularly occurs in both peak periods between Junctions 27

and 26 (M606/A58 Chain Bar). There are also locations at the roundabout junctions with the local road network where traffic congestion and delay occurs.

4.5 The local road network also suffers from congestion with many hot-spots around the main towns during peak periods. In addition some locations, particularly the A58 through Stump Cross and Hipperholme as well as the A629 at Salterhebble and Ainley Top, can suffer congestion outside of the peak periods. This congestion on the local road network has 'knock-on' effects for the bus network.

4.6 In addition to congestion on the roads overcrowding issues are also evident on the trains. These issues usually occur during a 90 minute period during both the AM and PM peak. There is evidence of overcrowding on services via Halifax, especially the Blackpool North trains and services via Brighouse, although most of these issues occur between Mirfield and Morley.

Regional and Local Transport Strategy

4.7 The **Leeds City Region Transport Strategy** identifies connectivity corridors in the sub-region which provide the major inter-regional connections. Roads within this core transport network cater for the majority of public, private and commercial vehicle movements. The city region transport strategy notes these are unlikely to be sufficient resources to extend the road network significantly therefore the priority is to manage, maintain and improve this network. Investment will target improving journey times and reliability for all road users as well as demand management.

4.8 The **West Yorkshire Local Transport Plan 3** (LTP3) is a 15 year plan covering the period 2011 to 2026, developed by the West Yorkshire Integrated Transport Authority (Metro) in conjunction with the five constituent local authorities. The three objectives of the plan are;

1. **Economy** - To improve connectivity to support economic activity and growth in West Yorkshire and the Leeds City Region.
2. **Low Carbon** - To make substantial progress towards a low carbon, sustainable transport system for West Yorkshire, while recognising transport's contribution to national carbon reduction plans.
3. **Quality of Life** - To enhance the quality of life of people living in, working in and visiting West Yorkshire.

4.9 The strategy identifies six 'big ideas' that will drive progress towards the objectives;

1. Enhanced travel information,
2. Fully integrated ticketing,
3. Investment in low carbon modes of travel,
4. A new approach to buses,
5. Phasing in stronger demand management, and
6. New approach to network management.

4.10 The emerging **Calderdale transport vision** is a transport system that is people and business friendly. The Council recognises transport cannot be seen as an end in its own right but it must contribute to the challenges facing society including economic prosperity, health and well-being as well as minimising damage to the environment, particularly through CO_2 emissions. Three main themes emerging from the vision are residents and businesses want a transport system where; everything is connected, everything is high quality and everything is reliable.

Role / Potential Impact of the Local Plan

4.11 The Calderdale Core Strategy is still in production but the Preferred Options suggest housing, employment, retail, leisure and service facilities should, wherever possible, be contained within existing urban areas. Halifax being the most important and largest urban area within Calderdale is therefore proposed to be the prime focus for housing, employment, shopping, leisure, education, health and cultural activities/ facilities. It is also important it should also strengthen its role as the main

transport hub in Calderdale providing excellent transport connections to Leeds, Manchester, Bradford, Huddersfield and other towns and cities of national/ regional importance.

4.12 Likewise improvements to the public transport network in Brighouse, a main local focus for housing, employment, shopping, leisure, education, health and cultural activities/ facilities, are important. Brighouse will therefore need to provide good transport links with Leeds, Manchester, Bradford, Huddersfield, Halifax and other towns and cities of national/ regional importance.

4.13 The Core Strategy also notes that transport and its proper planning are fundamental to connecting people with jobs, services and leisure opportunities. It is an important element of the Core Strategy that new and existing developments are located so that they remain accessible by public transport, cycling and walking and can access employment, services and other facilities to reduce the need to travel by car. The potential growth areas identified within the Core Strategy Preferred Options will need to include improved transport provision both in terms of public transport and improvements to the local road network to mitigate against increased traffic due to the development.

4.14 The Core Strategy aims to encourage sustainable modes of transport. It is, however, inevitable that new development will impact upon the road network which will need mitigation wherever possible. The infrastructure schedule indicates some of the schemes which may be required in the future but it is likely that other issues will require addressing as the Core Strategy progresses. These new issues will be considered in future iterations of this IDP.

Strategic Road Network

4.15 The Highways Agency has the responsibility for the operation of the Strategic Road Network (SRN). The key concern of the Agency is to protect the primary role of the SRN and to ensure its safe and efficient operation in the context of Government policy not to cater for unrestrained road traffic growth. Consequently, the Highways Agency expects to see demand management policies and the identification of appropriate mitigation measures that are both feasible and capable of funding incorporated into Local Plans.

4.16 The SRN within Calderdale relates to the M62 motorway. Direct access to the M62 is available at junctions 22 to 26, with junctions 22, 24, 25 and Hartshead Moor Services all being located within Calderdale. Highways Agency modelling shows that the SRN is showing stress at several locations which will be exacerbated by future growth in West Yorkshire.

4.17 To assist in combating this a Managed Motorway scheme between Junctions 25 and 30 is currently being progressed and will make use of variable speed limits and controlled use of the hard shoulder *'hard shoulder running'* in order to increase capacity and relieve existing traffic delays.

4.18 The introduction of the Managed Motorway scheme will remove the causes of congestion and delay on the improved sections of the M62. However some peak period delay resulting from slow-moving traffic may still occur between M62 Junctions 24 and 25 eastbound in the PM peak. In making assessments of future operating conditions on the sections of the SRN serving Calderdale, the Agency has to take account of the cumulative impact of underlying growth in strategic traffic and the additional traffic that will be generated by development proposals in Calderdale and neighbouring Local Planning Authority areas.

4.19 There is expected to be some erosion of the benefits of the Managed Motorway schemes by 2026 implying that there could be some delay resulting from slow-moving traffic. A number of junctions on the M62 motorway serving Calderdale are anticipated to need improvement works as a result of the combination of underlying growth and development proposals in Calderdale and neighbouring districts. The locations and possible mitigation measures for Calderdale are;

Table 4.1 Highways Agency schemes

Location	Scheme	Comment
M62 Junction 24 (Ainley Top)	Signalisation of roundabout and/or re-design to form a 'hamburger' style layout.	The scheme could help reduce queues on the local road approaches to the roundabout.
M62 Junction 25 (Brighouse)	Signalisation of the roundabout.	To maximise capacity on the roundabout and manage queue length on motorway off-slip roads.
	Improvements to traffic management in Brighouse town centre.	To stop traffic queue from junctions in Brighouse town centre extending back on to the roundabout at Junction 25.
M62 Junction 26 (Chain Bar)	Capacity enhancement on the roundabout at the junction.	To ease congestion in the PM peak by changing lane designation on the M62 eastbound exit slip and widening part of the roundabout.
	Capacity enhancement on the M62 at the westbound on-slip and M606 merge point.	To prevent traffic on the slip road, M606 and M62 queueing back from the merge point.

Source: Highways Agency

4.20 The Highways Agency are currently re-assessing future infrastructure provision and the combined impacts of growth across West Yorkshire, including Calderdale. This work will be considered and integrated into the publication version of the Core Strategy as well as later versions of this IDP. The potential for a new motorway junction (24a) serving Calderdale and Kirklees is being considered on the A641. This proposal could have the effect of improving connectivity to Huddersfield and Brighouse as well as reducing congestion at other junctions.

Local Road Network

4.21 Calderdale Council is responsible for the safe operation of the local road network within the district. The main routes include the A646 which connects the towns of the Upper Calder Valley to the rest of the district as well as Greater Manchester and Lancashire and the A629, A58 and A647 linking the district with Bradford, Leeds, Huddersfield and other parts of west and north Yorkshire.

4.22 Forecasts indicate that travel demand is increasing across the UK meaning congestion will inevitably increase within Calderdale, irrespective of any growth planned within the Local Plan. In terms of growth related to the Local Plan all of the options identified in the Core Strategy Refined Issues and Options (RI&O) created additional stress upon the network but none were significantly better or worse than any other. In terms of improvements to the local network the topography of Calderdale is a constraint on significant additional highway infrastructure. It is therefore important the Core Strategy considers other types of improvement such as public transport interventions in conjunction with highway improvements.

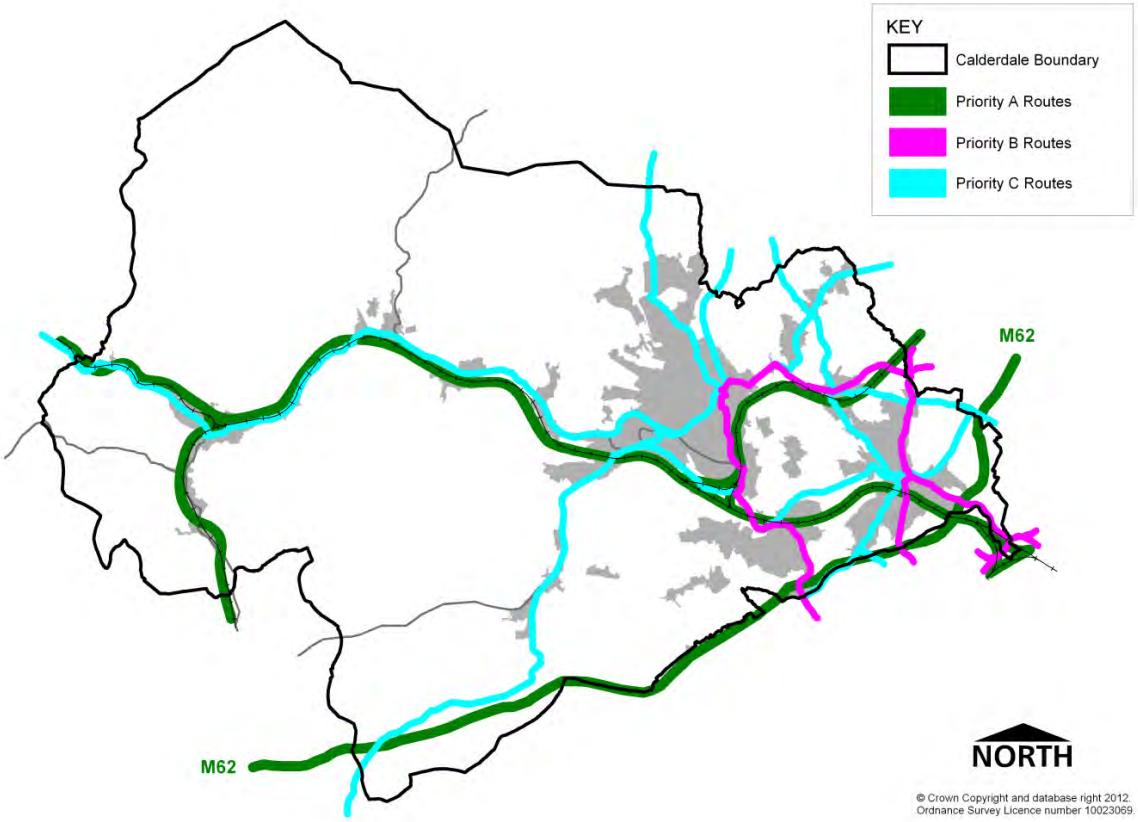
4.23 There are a number of highway bottle-necks which restrict economic growth and therefore require some form of future resolution. These include;

- A58 at Stump Cross and Hipperholme;
- A629 from Ainley Top to Halifax Town Centre;
- Hebden Bridge Town Centre;

- Sowerby Bridge Town Centre; and
- Brighouse Town Centre.

4.24 The Preferred Options consultation on the Core Strategy indicates a preference for the majority of new growth to be located within eastern parts of the district. In recognition of this focus and the current bottle-necks the Core Strategy identifies a number of key transport routes which are proposed investment priorities. In terms of the local road network these priorities have been chosen to facilitate growth within eastern parts of the district and to overcome existing transport constraints.

Map 4.2 Priority transport investment routes



4.25 The Council, along with its partners and neighbouring Councils, are actively investigating schemes which will both mitigate the growth proposed within the Core Strategy and seek to address the identified bottle-necks. These schemes are being developed through an implementation plan for the Local Transport Plan (LTP) and a West Yorkshire Transport Fund schemes being proposed for Calderdale include schemes along the A629, A58 and A641 as well as schemes within our town and local centres. The schemes aim to improve the connectivity between centres both by private and public transport. The development, deliverability and feasibility of these schemes together with opportunities to increase funding through the development process will be reflected in the publication version of the Core Strategy and later versions of this IDP.

Rail

4.26 Calderdale is well placed on the railway network with the Calder Valley line running through its heart. The Calder Valley line connects three of the largest cities in the UK in Leeds, Bradford and Manchester and therefore providing better connectivity to these cities would provide significant economic benefits to the district. Calderdale already enjoys a number of direct services to other regional towns and cities such as Manchester, Leeds, Bradford, York, Wakefield and Blackpool as well as a recently introduced direct service to London from Halifax and Brighouse. Within Calderdale there are 7 stations

located at; Halifax, Brighouse, Sowerby Bridge, Mytholmroyd, Hebden Bridge, Todmorden, and Walsden.

4.27 Whilst the district is well placed on the network the Leeds City Region Connectivity Study identifies Calderdale has poor connection by rail to other parts of the city region. The line is constrained by a number of bottle-necks including;

- platform / line capacity at or approaching Leeds and Manchester Victoria stations;
- the number of single line sections;
- short platform lengths;
- slow maximum line speeds; and
- long signalling headways (the space required between trains) along particular sections of the Line.

4.28 Additionally, the Calder Valley Line has poor quality rolling stock in comparison to other Trans-Pennine rail corridors. The existing trains adversely affect passenger comfort and journey time reliability. In addition, there are overcrowding problems experienced on peak services towards both Leeds and Manchester and the immediate opportunities to address this is restricted by shortages of available rolling stock.

4.29 Route Utilisation Studies in the area have identified a number of possible interventions which could improve some of the existing constraints. These include the 'Northern Hub' which is a £530million scheme to connect Manchester Victoria and Manchester Piccadilly stations, enabling through travel to all central Manchester stations and beyond. The 'Northern Hub' also supports the re-opening of Todmorden Curve which will assist in movements between Burnley and East Lancashire via Todmorden to Manchester. Funding for the first phase of the 'Northern Hub' scheme (£85m) was confirmed in the March 2011 Budget, with development work commencing this year. The project could open up new destinations and improve journey times and rolling stock from and through Calderdale. Todmorden Curve was recently identified for funding through the Autumn 2011 National Infrastructure Plan.

4.30 Network Rail's Initial Industry Plan outlines proposals to invest £5.6 billion of improvements nation-wide between 2014 and 2019, on top of £4.9 billion of civil engineering jobs already underway. Whilst none of the funding is yet committed a number of improvements could benefit Calderdale. Amongst the proposals is the possibility of a £10million scheme to reopen the third platform at Halifax railway station enabling more services and better reliability. Other improvements identified include;

- Enabling direct access to Manchester Airport from the Calder Valley Line;
- West Yorkshire train lengthening Halifax to Leeds to accommodate more seating;
- Journey time and connectivity improvements between Bradford and Manchester; and
- An extra train each hour in each direction between Leeds and Manchester via Bradford and Rochdale from December 2019.

4.31 Electrification of all or part of the Calder Valley Line is being pursued to improve speed and reliability on the line. The Council is actively working with Metro and Network rail to open two potential new stations in the medium to long-term at Elland and Hipperholme as well as improving access and facilities at existing stations. The potential improvements include increasing the availability of car parking, improved access, particularly at Sowerby Bridge, Todmorden and Hebden Bridge and better bus-rail integration in the Upper Valley towns.

Bus

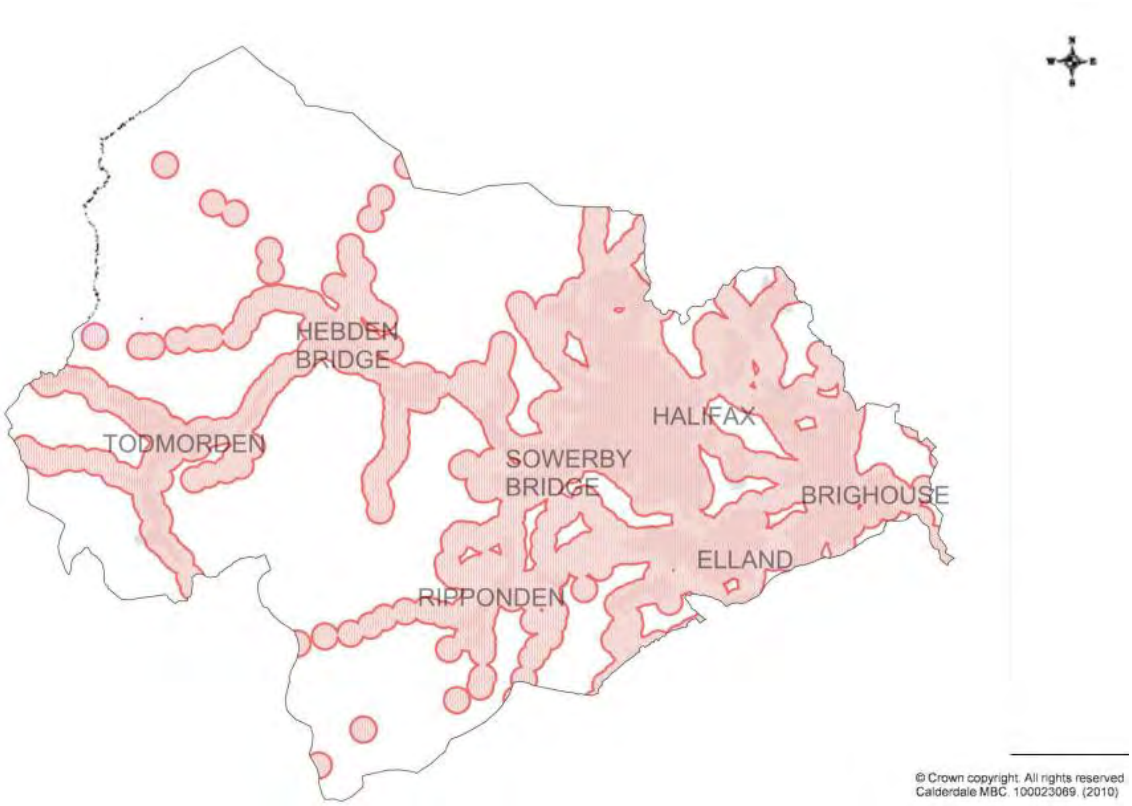
4.32 The district has a comprehensive bus network in operation with accessibility mapping suggesting that the overwhelming majority of the population is within 400m of a bus route during week day periods. However proximity to a frequent bus service is much less consistent. The majority of the services are run by the First Group, however other operators do run some local routes. The most

high frequency routes focus upon the main routes towards Bradford, Huddersfield and the Upper Calder Valley. In addition there is an extensive, but less frequent, rural bus network which is vital to connecting isolated communities with the services and facilities as well as for onward travel. The main bus stations are located at Halifax, Brighouse and Todmorden with smaller more informal facilities in other localities such as Elland. The stations and services do not currently integrate well with other modes of transport, such as rail.

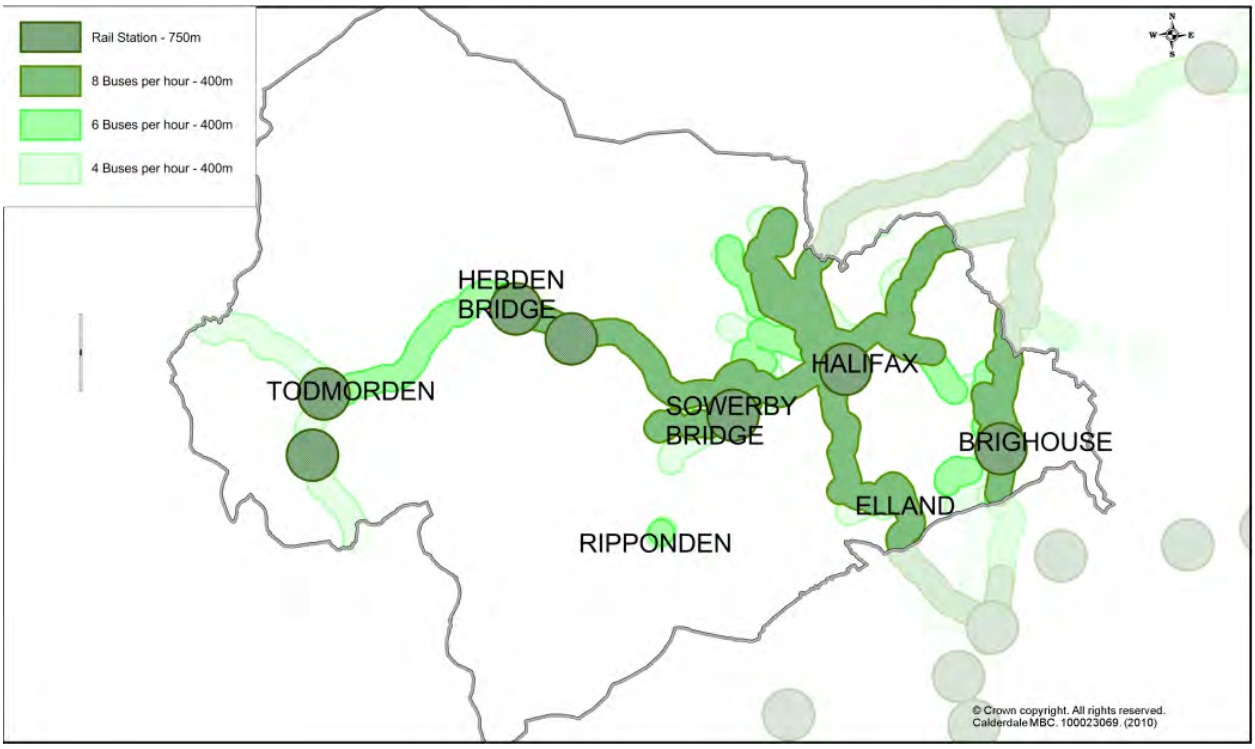
4.33 To improve the experience on buses the Local Transport Plan (LTP) 3 is introducing bus quality contracts/ partnerships scheme to make operators more accountable and provide better value for money. Integrated Ticketing and smartcards are also being developed to help reduce travel times by minimising 'on-bus' purchases and make it easier to transfer from one mode of transport to another.

4.34 Due to the issues with expansion of the local road network, highlighted above, it is important that buses can freely flow throughout the district. A number of interventions, including junction priorities and public transport hubs, are being considered to improve the speed and reliability of public transport. Transport hubs will provide facilities to support high frequency public transport interchange along core transport routes within the district. The Core Strategy will assist in the co-ordination of these improvements by directing the majority of improvements to existing problem areas and future growth locations.

Map 4.3 Areas within 400m of a bus stop



Map 4.4 Map showing proximity to frequent bus service



Walking / Cycling

4.35 Calderdale has a network of around 2000 paths totalling over 700 miles of footpaths and 125 miles of bridleways, along with a very short network of byways open to all traffic. This network includes two national trails – the Pennine Way, (for walkers) and, for walkers, horse riders and cyclists, sections of the Pennine Bridleway. The Pennine Bridleway through Calderdale is complete and connects with a section running through Lancashire to form a 47-mile circular route known as the Mary Towneley Loop. Circular routes for walkers can be found on the Calderdale Way, the Todmorden Centenary Way and the Brighouse Boundary Walk, along with numerous shorter walks based around some of Calderdale's villages.

4.36 There are five major cycle routes running through Calderdale. Route 66 and 68 are part of the National Cycle Network. Route 66 runs along the valley floor from the east border at Brighouse to the west border at Warland. Route 68 in contrast runs north to south over the hills and quiet country roads. Route 68 passes through Hebden Bridge, Mytholmroyd and Sowerby Bridge.

4.37 To aid sustainable travel and healthier lifestyles Calderdale Council are seeking to improve the cycle network further. The plan is to focus on National Cycle Network Route 66 as a trunk route using other major cycle routes as branch connections. Shorter routes will then run off the trunk and branch routes using bridleways, off road links and low traffic roads. With this structure in place cyclists will be able to access the major towns and suburbs of Calderdale. Current projects include linking the Calder/Hebble Corridor through the Hebble Trail and extensions to Cooper Bridge.

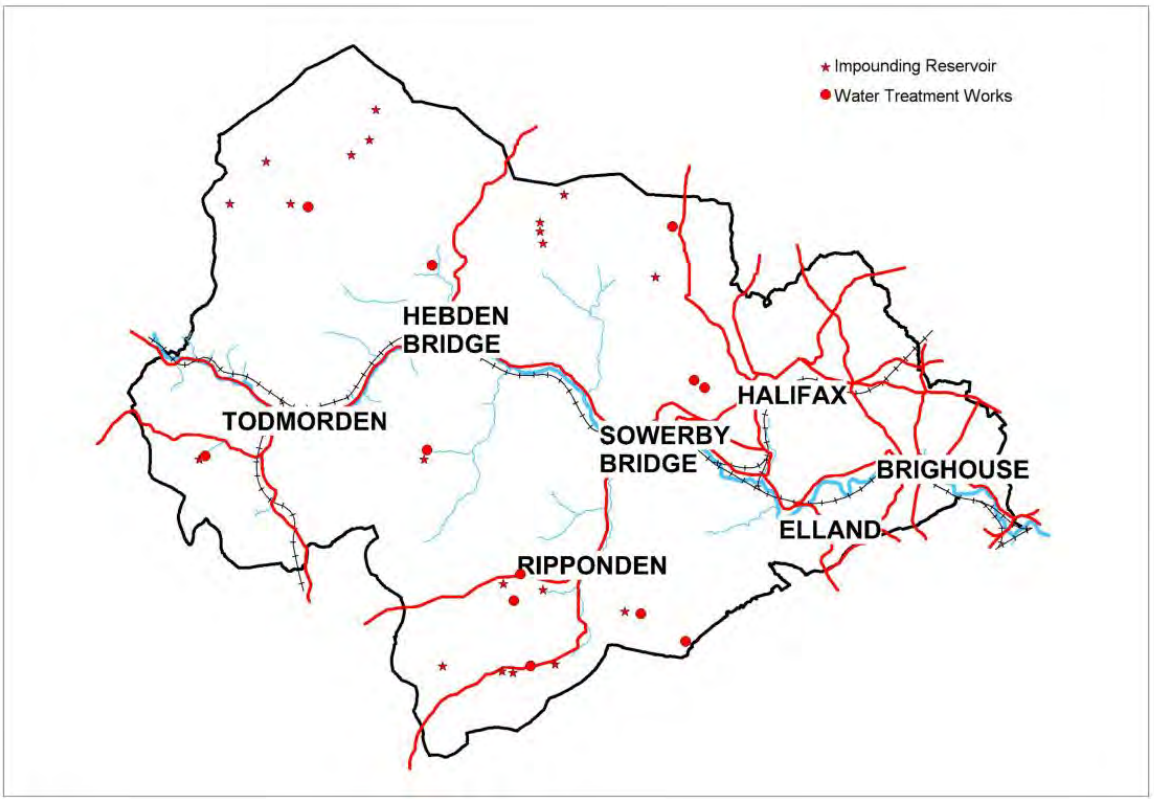
Utilities

Water Supply and Waste Water

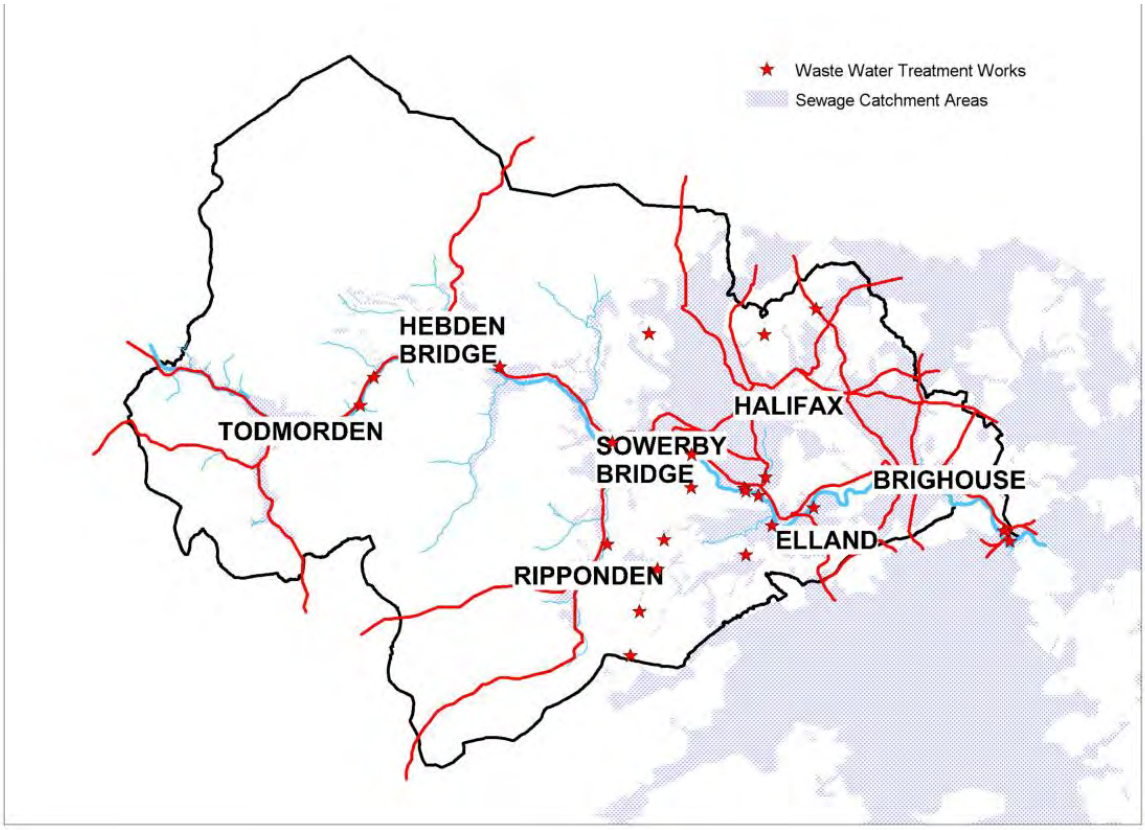
Primary Legislation: Water Resources Act 1991, Water Industry Act 1991, Environment Act 1995, Water Act 2003
Main Players in Calderdale: OFWAT, Yorkshire Water, Environment Agency

Existing Infrastructure

Map 4.5 Impounding Reservoirs and Water Treatment Works



Map 4.6 Waste Water Treatment Works and Catchments



Introduction

4.38 Yorkshire Water is the sole organisation responsible for water supply and the operation of waste water treatment works in Calderdale. The local authority is the lead local flood authority in relation to surface water drainage whilst the Environment Agency is principally involved with flooding associated with water courses and the protection of water resources including improvements to water quality. These matters are covered later in this document.

4.39 The water industry is regulated by the Water Services Regulation Authority (Ofwat) who every 5 years carries out a periodic review of Yorkshire Water's future investment needs and determines how much it can charge to help finance its activities. This is in the form of a 5 year business plan with the current one adopted in 2009 covering the period 2010 to 2015. As part of the process of approving the business plan a Strategic Direction Statement (SDS) is produced, the most recent published in 2010. This sets the direction of travel for the long term (25 years). For the period 2010-2035 the SDS assists the regulator to consider Yorkshire Water's draft and final 5 year business plans in a long term context.

4.40 The current Business Plan is Asset Management Plan 5 (AMP5) and was based on information available in 2008 whilst AMP6 will be published for the next 5 year period with an information base date of mid-2013. This will be submitted to Ofwat in 2014. It will therefore be able to take account of proposals in the Core Strategy and the emerging list of specific sites in the Land Allocations and Designations DPD. Yorkshire Water also produces a Water Resources Management Plan with the latest one covering the period 2010 to 2035.

4.41 Yorkshire Water is a statutory consultee in relation to Local Plan and has a duty to provide water supply and waste water treatment to development identified in adopted development plans. The content of adopted development plans is therefore vitally important to investment planning by Yorkshire Water. Clearly the more certainty there is in relation to the location of development the greater the assistance to Yorkshire Water in formulating its own investment plans.

Role / Potential Impact of the Local Plan

Water Supply

4.42 Yorkshire Water has in place a grid system for water distribution running west to east and vice versa, and north to south and vice versa across Yorkshire and therefore water supply is not a barrier to development as supply can be moved around as required.

Waste Water

4.43 Yorkshire Water operates a number of waste water treatment works (WWTWs) across Calderdale and specific information regarding the capacity of each of these is shown in Table 4.2 'Capacity at waste water treatment sites in Calderdale.'

Table 4.2 Capacity at waste water treatment sites in Calderdale.

Waste water treatment site	Spare Capacity[(1)] Y/N	Comments
Brighouse	Y	Form one catchment. Significant spare capacity for roughly 10% population growth/2,000 new dwellings. If needed additional capacity can be undertaken in future AMPs.
Brighouse Upper		
Brighouse Lower		

Waste water treatment site	Spare Capacity(1) Y/N	Comments
Barsey Green	N?	Serves a population of approx. 62 people. Could not accommodate any development without more detailed investigation.
Scammonden	N?	Serves a population of approx. 24 people. Could not accommodate any development without more detailed investigation.
Ripponden Wood	N	At capacity - could only accommodate existing UDP allocations or committed sites
Halifax North Dean	Y	Form one catchment. Significant spare capacity for roughly 10% population growth/4,000 new dwellings. If needed additional capacity can be undertaken in future AMPs.
Salterhebble		
Halifax Copley		
Pickwood Scar	N?	Serves a population of approx. 12 people. Could not accommodate any development without more detailed investigation.
Lee Lane	N?	Serves a population of approx. 60 people. Could not accommodate any development without more detailed investigation.
High Royd	N	At capacity - could only accommodate existing UDP allocations or committed sites
Stoodley Glen	N?	Serves a population of approx. 27 people. Could not accommodate any development without more detailed investigation.
Gibb Lane	N?	Serves a population of approx. 29 people. Could not accommodate any development without more detailed investigation.
Redacre	Y	Spare capacity for roughly 10% population growth/300 new dwellings. If needed additional capacity can be undertaken in future AMPs.
Eastwood	Y	Spare capacity for roughly 10% population growth/500 new dwellings. If needed additional capacity can be undertaken in future AMPs.

1. The above data is based on a desktop study using current consents and legislation in January 2012. The available capacity may change in the future subject to the Environment Agency issuing new consents, new EU legislation or other unforeseen changes.

4.44 Yorkshire Water requires a 400m cordon sanitaire to be maintained around each of its WWTWs. In calculating the future capacity of these WWTWs Yorkshire Water takes into account a number of factors including extant planning permissions and proposals in development plans (such as the Local Plan Core Strategy) together with those initiatives in the Code for Sustainable Homes aimed at reducing water usage. Where a shortfall in capacity is identified technological advances mean that the most likely solution will be an upgrading of the existing WWTWs rather than entirely new facilities

being built. Such an approach means that the availability of land for expansion or new facilities is not a constraint on Yorkshire Water's ability to increase capacity. Any requirements for additional capacity will be incorporated by Yorkshire Water into its next business plan (AMP6). Therefore any identified lack of capacity will not prevent development taking place but may influence its timing. Whilst the Core Strategy will include phasing policies for the release of sites, this approach will partly reflect the need to upgrade any WWTWs first as identified through ongoing discussions with Yorkshire Water.

Surface Water Drainage

4.45 This is the shared responsibility of Yorkshire Water, the local authority and the Environment Agency. The amount of surface water is influenced by a number of factors including the use of Sustainable Urban Drainage Systems (SUDS) and these matters are covered in more detail later in this document under 'Flood Risk and Drainage in Calderdale'.

Summary

4.46 Water supply and treatment is not a constraint on growth. Yorkshire Water has a responsibility to supply potable water and take away waste water. Phasing of development may be necessary to enable improvements to the capacity of some WWTWs. In order to formulate a delivery timetable Yorkshire Water require more detailed information on the planned development (particularly numbers of houses and the distribution) for any given waste water treatment catchment.

Electricity

Major legislation: Electricity Act 1989, Utilities Act 2000, Energy Act 2004, Electricity Regulation Act 2006
Main Players in Calderdale: Yorkshire Electricity Distribution Limited (YEDL) owned by CE Electric UK, Ofgem (Regulator)

Existing Infrastructure

4.47 This includes the infrastructure operated and maintained by National Grid and Yorkshire Electricity Distribution Limited (YEDL).

4.48 **National Grid** - National Grid's high voltage electricity overhead transmission lines / underground cables within southern and eastern Calderdale form an essential part of the electricity transmission network in England and Wales. There is a principal electricity substation connected directly to the high voltage network located in Low Fields Business Park, Elland. In the order of a further 500 local substations transfer and distribute power to their respective local areas. The following is a summary of National Grid's major assets in Calderdale:

- YW line – 275kV route from Bradford West substation in Bradford to Elland substation in Calderdale.
- 4ZP line – 400kV route from the 4ZZ line in Calderdale to Padiham substation in Burnley
- ZP line – 400kV route from the 4ZU line in Wakefield to Rochdale substation in Rochdale
- ZPC line – 400kV route from Elland substation in Calderdale to Elland Tee Junction (ZP line)
- 4ZZ line – 400kV route from Bradford West to Monk Fryston substation in Selby
- Elland substation – 275kV & 132kV

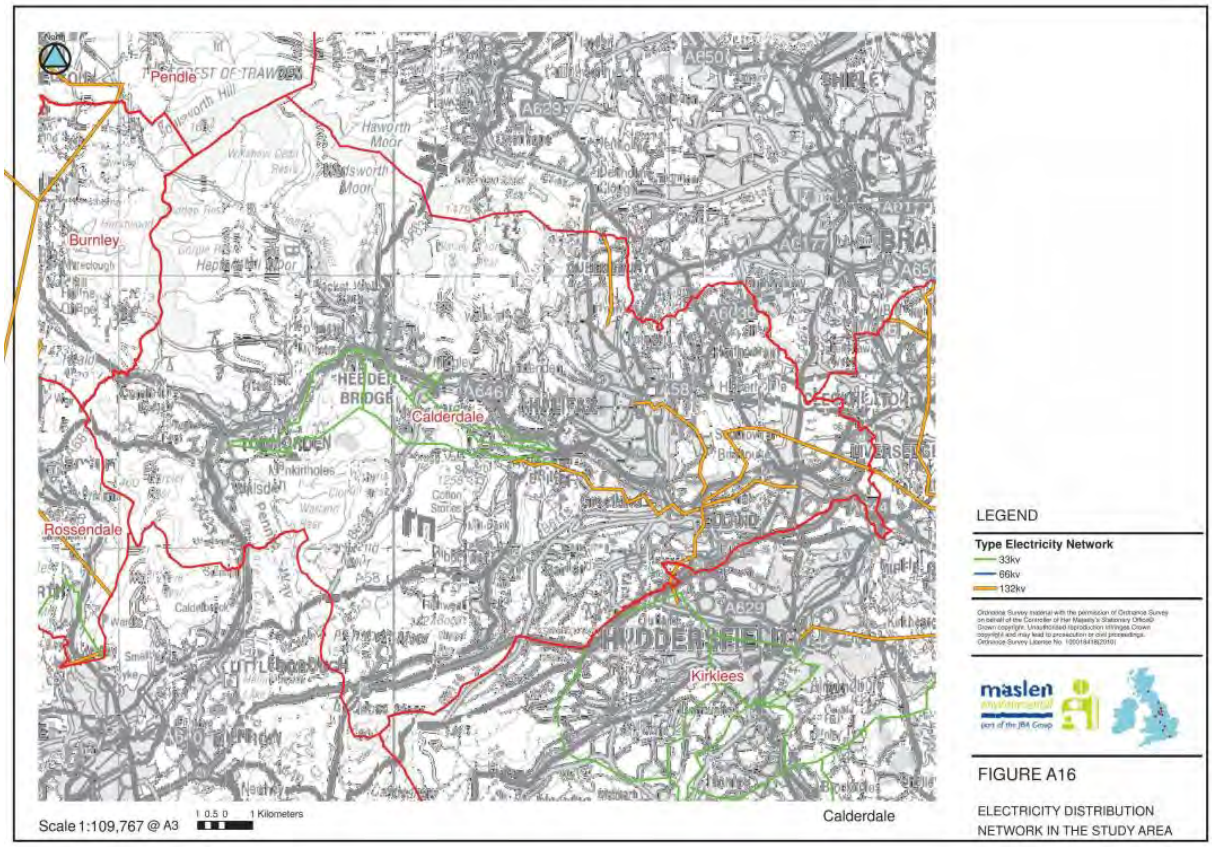
4.49 **YEDL** – Virtually every urban road has a low voltage electricity underground cable or overhead line, with 11kV available close by. These voltages represent YEDL's standard network. Their key assets are those operating at 33kV and higher voltages. Information about these assets is published annually in YEDL's Long Term Development Statement (LTDS). Map 4.7 'Electricity Distribution Network' shows the local electricity distribution network.

Introduction

National Grid

4.50 National Grid, as the holder of a licence to transmit electricity under the Electricity Act 1989, has a statutory duty to develop and maintain an efficient, co-ordinated and economical transmission system of electricity and to facilitate competition in the supply and generation of electricity. National Grid operates the national electricity transmission network across Great Britain and owns and maintains the network in England and Wales, providing electricity supplies from generating stations to local distribution companies. To facilitate competition in the supply and generation of electricity, National Grid must offer a connection to any proposed generator, major industry or distribution network operator who wishes to generate electricity or requires a high voltage electricity supply. Often proposals for new electricity projects involve transmission reinforcements remote from the generating site, such as new overhead lines or new development at substations. If there are significant demand increases across a local distribution electricity network area then the local network distribution operator may seek reinforcements at an existing substation or a new grid supply point. In addition National Grid may undertake development works at its existing substations to meet changing patterns of generation and supply.

Map 4.7 Electricity Distribution Network



Local Distribution - YEDL

4.51 YEDL owned by CE Electric own and operate the electricity distribution network in Calderdale. The western boundary of Calderdale is also YEDL's traditional geographic boundary. To the west of this the network owner and operator is Electricity North West. Neither party is excluded from crossing the traditional boundary so there is the possibility that a remote dwelling near the boundary may get their electricity connection from Electricity North West.

4.52 The network owned and operated by YEDL comprises overhead lines and cables at 132,000 volts and below. It is the role of this local distribution company to distribute electricity to homes and

businesses. In respect of local development frameworks it is the regional distribution network that is of most interest.

4.53 The investment priorities of YEDL are set out in its Long Term Development Statement(LTDS) compiled in accordance with Distribution Licence Standard Condition 25 and revised and published 31st October each year. These include a 10 year forecast covering the latest volume forecasts, proposed system reinforcement projects and investment plans. Only those schemes with financial approval and guaranteed to take place are included.

4.54 As the local distribution company YEDL has a responsibility for strengthening the network and responding to changing patterns of supply and demand including:

- Connections: legal obligation to provide customers with a quotation for a connection to the network and install it if they want to proceed.
- Reinforcement: due to either organic demand growth from existing customers or intensive development of particular towns.
- Protecting the environment including distributed generation - renewable generation tends to output at lower voltages than conventional power stations and is often connected directly to the distribution network

4.55 The statements are also designed to assist users who may wish to identify parts of the system that are more readily able to accept their proposed connection. The limiting factor for a new connection varies depending on the type of equipment being connected. Part of the cost of a new connection is influenced by the distance from the proposed point of connection to the nearest section of the existing system with the necessary capability. In urban areas the primary system density is relatively high, whereas in rural areas the primary system is more sporadic. When considering large new or additional demand connections, the most common limiting factor is the available capacity at the nearest source substation.

Role / Potential Impact of the Local Plan

4.56 **National Grid** - The Energy White Paper makes clear that UK energy systems will undergo a significant change over the next 20 years. To meet the goals of the white paper it will be necessary to revise and update much of the UK's energy infrastructure during this period.

4.57 **Local Distribution Network** - The LTDS does not include any specific proposals for work on the distribution network in Calderdale. YEDL also produce an informal 10 year investment plan which gives some indication of further investment locations although there is no guarantee that an identified scheme within the plan will take place. The detailed design and justification takes place 1-2 years before investment takes place at which it is possible that the investment is cancelled or that a different solution is implemented. The following schemes are included in this informal plan but are not mentioned in the current LTDS:

- Elland – Lindley 132kV overhead line refurbishment (2014/15)
- Elland – Brighouse 132kV overhead line refurbishment (2017/18)
- Sowerby Bridge – Salterhebble 33kV overhead line refurbishment (2012/13)

4.58 Other improvements not specifically mentioned in the LTDS include in Halifax where YEDL is carrying out asset replacement at its major 132kV substation in the town centre. Whilst this does not directly increase capacity at the lower voltages, it provides the capacity for a new primary substation in the Halifax area, thus paving the way for future load growth.

4.59 The LTDS includes system diagrams showing the electrical connectivity and a table (Appendix 5 of LTDS) showing capacity and peak demand on each substation over the next 5 years. This indicates that over this period there is spare capacity across the district. In Brighouse the 132/33kV substation, while not planned for any asset replacement or reinforcement, has a reasonable amount of spare

capacity on it. This information has also to be interpreted through discussions with YEDL since in some instances the capacity is lower than stated. For example, in the Todmorden area the circuits supplying its substations have some limitations and therefore whilst the table states the firm capacity as being 23MVA, should demand increase much above 16MVA, YEDL would have to consider carrying out some significant reinforcement.

4.60 The majority of YEDL's infrastructure was installed in the 1960s and 1970s. YEDL replace equipment based on condition assessment rather than age and while much of the equipment is quite old, the condition is generally good. YEDL do not anticipate wholesale replacement of the network by 2026. When YEDL do replace infrastructure the modern equivalent is typically of a higher capacity than the original infrastructure. Should the electrical requirements resulting from growth planned in the Local Plan lead to the need for a new substation YEDL would require a suitable parcel of land (typically around 50mx50m) located near the load centre. YEDL also carry out flood risk assessments for sites with a flood risk of 1 in 100 years for river floods using information supplied by the Environment Agency. All existing sites with primary network infrastructure are assessed and any necessary flood defence works carried out. On the secondary network (11kV and below) flood defence measures are not generally installed retrospectively but new substations are built in accordance with YEDL's flood defence policy.

4.61 There are a number of factors making planning for infrastructure over the period of the Core Strategy particularly difficult. For example, the load requirements of a future house could be quite different to those experienced in the past. A current typical house with gas central heating has a typical peak demand of up to 2kW. Hence a network capacity of 20MVA will normally suffice for 10,000 homes. However, should electricity become the energy source of the future with electric vehicles and/or electric heating then the capacity requirement for 10,000 homes could be significantly higher. Without a clear strategy concerning such potential changes YEDL continue to work on a house peak demand of 1.5-2kW unless a developer specifically identifies alternative load/generation requirements. This situation will need monitoring throughout the period covered by the Core Strategy.

4.62 **Decentralised Generation** - The historic model of power generated by a relatively small number of large power stations connected to the National Grid Electric Transmission system which then supplies the distribution networks at a relatively small number of fixed points is changing. Largely due to the increase in the use of renewables technology, an increasing number of smaller scale power generation schemes are being developed and these are connected directly to the distribution networks and known as distributed generation (DG). These create a number of technical challenges which are being addressed by the industry and the regulator including potential changes to network designs in the future.

4.63 The Renewable and Low Carbon Energy Study (2010) undertaken by Maslen Environmental for a number of South Pennine local authorities including Calderdale concluded that there were no particular grid connection and transmission restrictions on the development of Renewable and Low Carbon generation in Calderdale. Due to distances from the distribution network (see Map 4.7 'Electricity Distribution Network' above) and the associated increased costs in connecting to the network the study concluded that in general terms the west side of Calderdale was limited to no more than 7MW RLC generators as the closest networks are 33KV. The unit cost of connection involving work at 132kV and 400kV would be higher than at 33kV or 11kV.

4.64 Looking ahead over the period covered by the Core Strategy renewable and low carbon generation will change both in terms of advances in technology and also in the fiscal incentives designed to encourage this form of generation (eg the current feed-in-tariffs and potential European funding). Both of these factors will influence the extent of the role for decentralised generation with consequential effects on the role of the standard generation and distribution system. As decentralised generation grows this will reduce demands on the distribution network and the national grid, other than when electricity is sold to the grid and therefore requires connecting to it. Decentralised generation being

more efficient due to lower losses between generation source and end user than is the case with the standard distribution network will also help to reduce demand for electricity.

Summary

4.65 The supply of electricity is not a constraint on growth. YEDL has a responsibility for strengthening the network and responding to changing patterns of supply and demand. A number of challenges will be faced by YEDL over the period of the Core Strategy. Should electricity become the energy source of the future the load per dwelling will increase whilst the increasing role of renewable sources of energy will also influence the distribution networks of the future.

Gas

Major legislation: Gas Act 1986, Utilities Act 2000, Energy Act 2004
Main Players in Calderdale: Northern Gas Networks, Ofgem (Regulator)

Existing Infrastructure

4.66 This includes the infrastructure operated and maintained by National Grid Gas and Northern Gas Networks.

4.67 **National Grid Gas** – National Grid Gas does not own any gas transmission assets located within Calderdale.

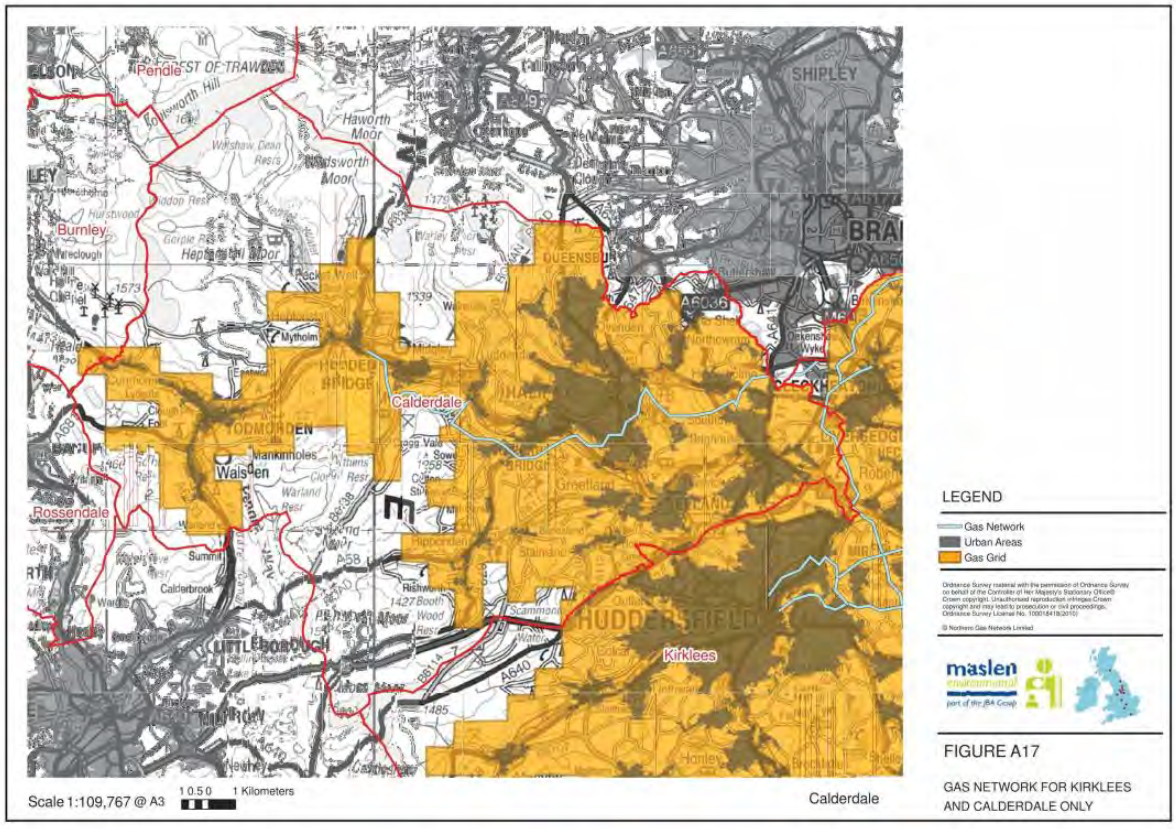
4.68 **Northern Gas Networks** – Major assets within Calderdale include a high pressure gas pipeline from Hebden Bridge eastwards through central Calderdale to Halifax and Brighouse/Hipperholme. The main gas holder is located north east of Halifax town centre on Charlestown Road whilst a series of gas governor stations help to mitigate gas distribution and transmission at the more local level. In the rural areas of the district there is often no networked provision at all with 7% of households in Calderdale ‘off-grid’ (mainly in the remote upland areas). Map 4.8 'Gas network in Calderdale' shows the network.

Introduction

National Grid

4.69 Owns and operates the high pressure gas transmission system in England, Scotland and Wales that consists of approximately 4,300 miles of pipelines and 26 compressor stations connecting to 8 distribution networks. National Grid has a duty to develop and maintain an efficient co-ordinated and economical transmission system for the conveyance of gas and respond to requests for new gas supplies in certain circumstances. New gas transmission infrastructure developments (pipelines and associated installations) are periodically required to meet increases in demand and changes in patterns of supply. Developments to the network are as a result of specific connection requests e.g. power stations, and requests for additional capacity on the network from gas shippers. Generally network developments to provide supplies to the local gas distribution network are as a result of overall demand growth in a region rather than site specific developments.

Map 4.8 Gas network in Calderdale



Local Distribution - NGNs

4.70 Northern Gas Networks is the primary Gas Transporter in Calderdale owning and operating the vast majority of the gas distribution system. The Long Term Development Statement, published annually, provides a ten-year forecast of transportation system usage and likely system developments that can be used by companies contemplating connecting to the local distribution system or entering into transport arrangements, to identify and evaluate opportunities. It is produced in accordance with Standard Condition D3 of Northern Gas Networks' Gas Transporters Licence. The Statement contains essential information on actual volumes and the process for planning the development of the system, including demand and supply forecasts, system reinforcement projects and associated investment.

4.71 Operating under the Gas Act 1986 (as amended 1995), Northern Gas networks 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. However, in many instances, specific system reinforcement may be required to maintain system pressures for the winter period after connecting a new supply or demand. Dependent on scale, reinforcement projects may have significant planning, resource and construction lead-times.

Role / Potential Impact of the Local Plan

4.72 **National Grid -** The Energy White Paper makes clear that UK energy systems will undergo a significant change over the next 20 years. To meet the goals of the white paper it will be necessary to revise and update much of the UK's energy infrastructure during this period. There will be a requirement for:

- An expansion of national infrastructure e.g. new gas pipelines and associated installations.
- New forms of infrastructure e.g gas storage sites.

4.73 **Northern Gas Networks (NGNs)** - Reinforcements to the gas network being generally customer driven are usually only required as and when new premises are built. NGNs only reinforce the network where they know new developments will occur and the reinforcements are phased wherever possible to meet the build up of demand. Currently there are no known constraints to development but this will need further confirmation when individual site details are known. Without knowing details of each site such as the number of dwellings, phasing, dwelling size, gas load details and connection point onto the network NGNs cannot advise definitively whether their infrastructure could cope with the level of housing growth envisaged in the Core Strategy. However, for those sites that are to be located within the area covered by NGN's infrastructure it is likely that many could be supplied from the existing network.

4.74 A further factor to consider is that in order to meet the higher levels of the Code For Sustainable Homes (mandatory from 2016) this may result in a reduction in the demand for gas since using gas as a fuel source is incompatible with achieving the highest level of the code. Therefore gas is likely to diminish in importance for housing growth over the period of the core strategy.

4.75 **Decentralised Generation -** Renewable forms of gas production in the form of landfill gas and sewage gas could meet around 1% of the total UK gas demand. Much of this is currently used to generate electricity but if injected into the gas grid it could be delivered directly into homes at high efficiency rates. Whilst this may not make a major contribution in the early part of the period covered by the Core Strategy it has the potential to do so later in the plan period, particularly if traditional sources of supply continue to diminish and dependent on any financial incentives which may be introduced by the government through a renewable heat policy. Northern Gas Networks is committed to looking at new innovations for renewable and low carbon energy sources such as the injection of biomethane gas into the distribution system.

Summary

4.76 The supply of gas is not likely to be a constraint on growth. Northern Gas networks have an obligation to develop and maintain an efficient gas distribution system and to comply with any reasonable request to connect premises. A number of changes affecting the demand for gas are likely to take place over the period of the Core Strategy including the effects of the Code for Sustainable Homes.

Telecommunications and Broadband[(1)]

Introduction

4.77 The provision of telecommunications and broadband differs from the services provided by the other utilities as they are not controlled in the same way with an open and developing market existing for the provision of telecom networks.

4.78 Most residential customers and small businesses access telephone and broadband services via BT's Open Reach Access Network and the Virgin Media network. BT's telephone exchanges together with the services they provide are listed in Table 4.3 'Services provided at BT Exchanges and extent of Cable Services (as at 31st October 2011)' whilst broadband coverage and speed is shown in Map 4.9 'Broadband coverage'. Within the main urban areas a significant proportion of existing homes and businesses use the Virgin Media network (cable television networks) for fixed line telephony and broadband services. This differs from BT's Open Reach network through its use of high capacity fibre optic cabling providing much higher broadband speeds with no degradation in service in relation to proximity to an exchange.

1 Unlike with the other utilities where discussions have taken place with the relevant providers

Table 4.3 Services provided at BT Exchanges and extent of Cable Services (as at 31st October 2011)

BT Exchange	Post Code	Residential Properties	Non Residential Properties	BT Wholesale	LLU Operator Presence	Cable Broadband Availability
Brighouse	HD6 1PD	12,371	691	ADSL SDSL	AOL O2/Be C&W/ Bulldog Sky/Easynet TalkTalk Tiscali TV Tiscali	Virgin - available in some areas
Calder Valley	HX7 5QL	4,288	290	ADSL ADSL Max FTTC	TalkTalk (CPW) Sky/Easynet	None
Elland	HX5 0DF	9,948	630	ADSL ADSL Max SDSL 21 WCN WBC FTTC	AOL O2/Be C&W/ Bulldog Sky/Easynet TalkTalk Tiscali TV	Virgin - available in some areas
Halifax	HX1 1BT	29,546	1,844	ADSL SDSL Cable	AOL O2/Be C&W/ Bulldog Sky/Easynet TalkTalk Tiscali TV Tiscali	Virgin - available in some areas
Hebden Bridge	HX7 7DD	4,025	382	ADSL ADSL Max	Sky/Easynet TalkTalk (CPW)	None
Hipperholme	HX3 3NH	4,933	214	ADSL ADSL Max	None?	None
Illingworth	HX2 8JD	7,151	230	ADSL ADSL Max SDSL 21CN WBC - 31st Oct 2011	AOL O2/Be Sky/Easynet TalkTalk (CPW)	Virgin - available in some areas
Ripponden	HX6 4AG	2,926	212	ADSL ADSL Max	TalkTalk (CPW)	None
Sowerby Bridge	HX6 1AA	5,638	300	ADSL ADSL Max 21CN WBC	AOL Sky/Easynet TalkTalk (CPW)	None

BT Exchange	Post Code	Residential Properties	Non Residential Properties	BT Wholesale	LLU Operator Presence	Cable Broadband Availability
Todmorden	OL14 7AD	7,000	553	ADSL ADSL Max 21CN WBC	AOL TalkTalk (CPW) Tiscali Tiscali TV	None

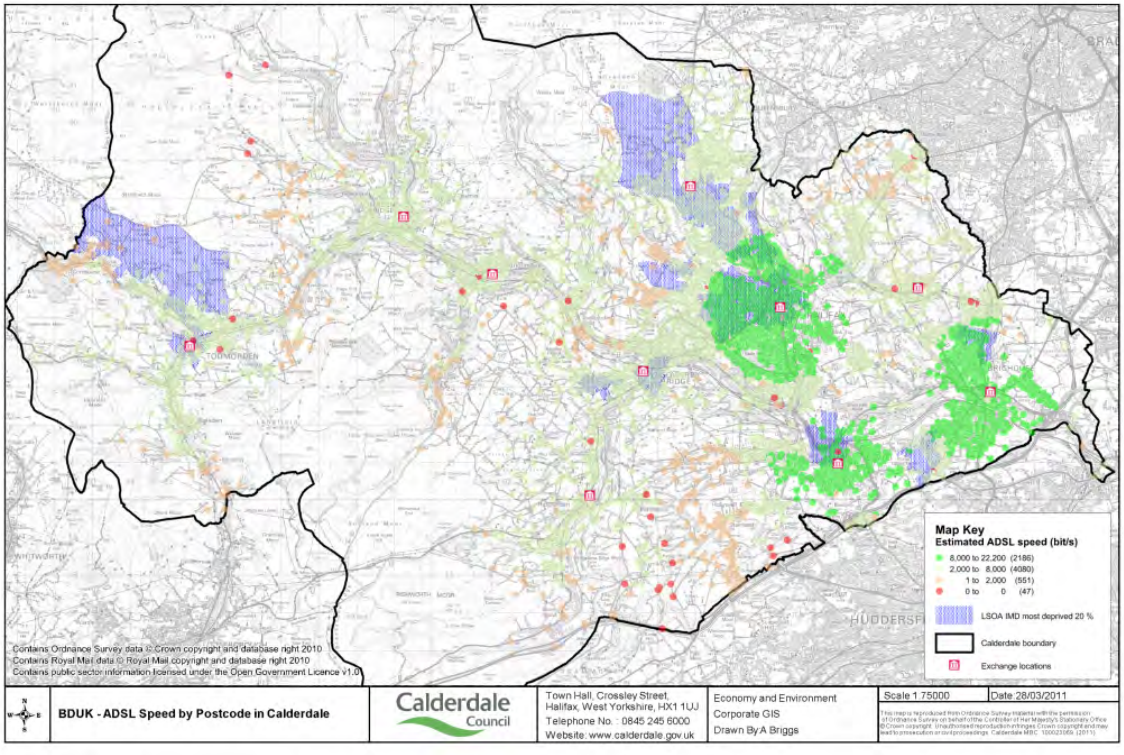
Source: SamKnows.com (October 2011)

Role / Potential Impact of the Local Plan

4.79 Generally network capacity should not be an issue that shapes or constrains the spatial options for development in Calderdale. Developments in technology together with ongoing investment in the core of the main networks mean that the capacity and capability of the networks continues to improve in response to demand. The exception would be isolated growth and in isolated areas. The rural parts of the district in particular are generally not covered by the Virgin Media network or any other access networks, and residents and small businesses rely exclusively on BT's Openreach network for fixed line telephony services. Broadband speeds (on the copper wire network) are lower in these areas largely due to distance from the exchange. Wireless solutions are currently being used to boost access in rural areas. There are also areas outside the rural parts of the district where access is poor e.g. Illingworth/Mixenden in North Halifax.

4.80 Ultimately fibre to the home (FTTH) which offers significantly faster and more reliable and consistent broadband connections than is possible using the copper wire access networks would appear to be the technology of choice and as such is being adopted as the standard in major new build developments nationally. BT has recently announced plans to install optical fibre in the local network including deploying fibre to the cabinet (FTTC) which leaves a short copper link from the cabinet to the customer. Within Calderdale this includes the Calder Valley and Halifax exchanges.

Map 4.9 Broadband coverage



4.81 Technological advances will continue over the period covered by the Core Strategy with potential developments including advances in the provision of wi-fi, the integration of broadband and mobile technology and access to dark fibre which offers much higher speeds.

4.82 The Council is engaged with these rapidly developing technologies and current initiatives include:

- Seeking to obtain district wide coverage and faster broadband speeds. To this end the Council is supporting a West Yorkshire bid for broadband funding and the development of a local broadband plan. This follows the government's Broadband UK (BDUK) initiative which aims to raise coverage and line speeds across Britain and from which funding can also be obtained.
- The Council is testing the viability of accessing funding though the Yorkshire and Humber European regional development Fund in order to obtain a point of access to the dark fibre running through the Calder Valley along the railway and canal side. This fibre provides the highest available global line speeds (currently in excess of 100 mbs with unlimited potential) but the nearest point of access is in Huddersfield.

Summary

4.83 The provision of telecommunications and broadband is not likely to be a constraint on growth per se with the market responding to demand. However, in order to provide residents and businesses (both existing and new) with the fastest broadband available the Council must continue to encourage the development of the latest broadband technologies.

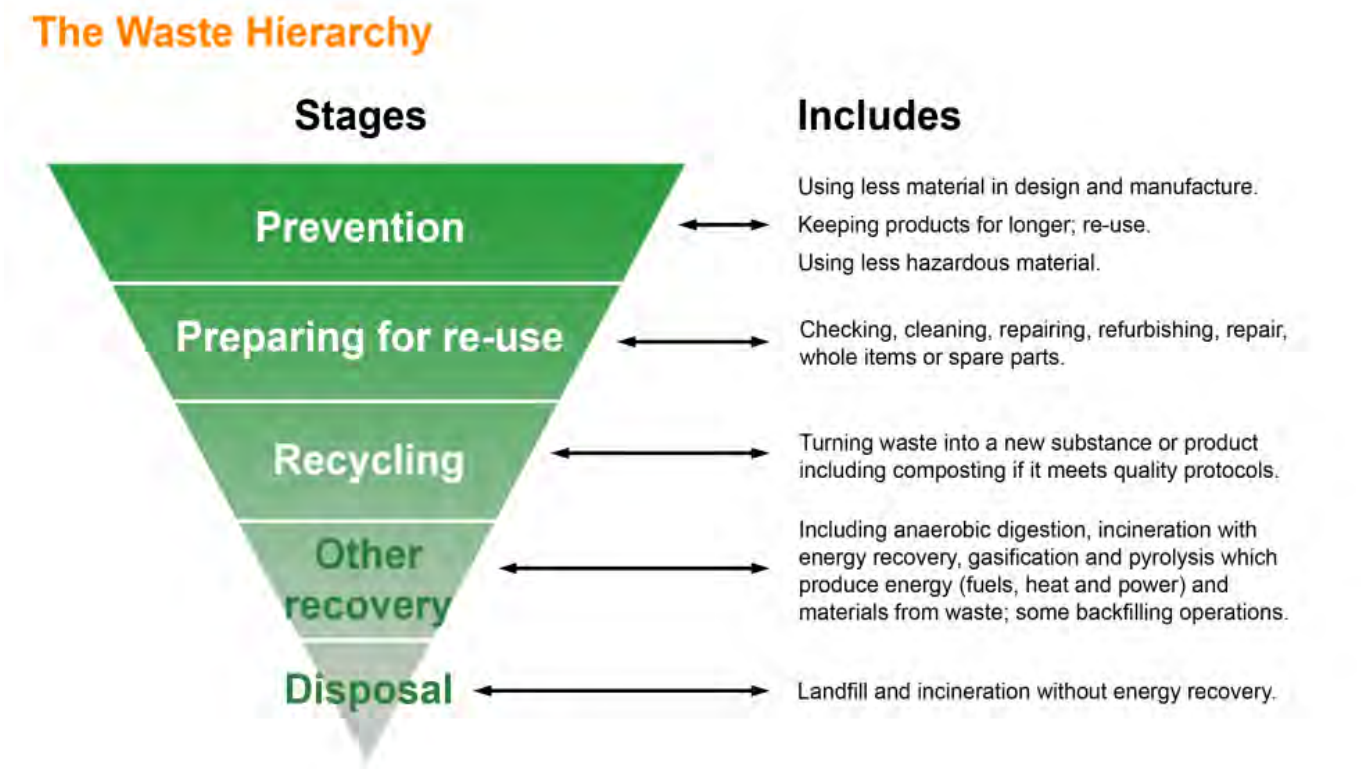
Waste management

Introduction

4.84 The main EU legislation is in the shape of EU Waste Framework Directive,[(2)] which introduced the 'Waste Hierarchy', transposed through the Waste (England and Wales) Regulations 2011. Through the Waste Hierarchy, landfill disposal is seen as a last resort, and waste should be considered as a resource rather than materials that should be disposed of.

2 EU Waste Framework Directive (2006/12/EC) Revised November 2008

Figure 4.1 Waste Hierarchy



Source: Government Review of Waste Policy in England 2011

4.85 The EU Landfill Directive[3] has gradually increased the costs of sending waste to landfill, and which the previous government introduced a Landfill Tax Escalator as a response. The Landfill Directive contained the following targets:

- By 2013 to reduce Biodegradable Municipal Waste (BMW)[4]
- By 2020 to reduce BMW landfilled to 35% of that in 1995.

4.86 National Planning Policy for waste is set out in Planning Policy Statement 10: Planning for Sustainable Waste Management. This document repeats overall government policy on waste, in protecting human health, and reducing the amount of waste produced, and viewing waste as a resource. With regards to waste infrastructure, PPS10 requires Waste Planning Authorities to identify suitable sites and areas in Development Plan Documents.

4.87 The National Waste Strategy (2007) sets out targets for the recycling and composting of household waste. These are for at least 45% by 2015, and 50% by 2020. Concerning the recovery of value from municipal waste, the target is 67% by 2015, and 75% by 2020. The coalition government published a Waste Policy Review in 2011, however this did not replace the National Waste Strategy or PPS10, and therefore these two documents remain in place for the time being.

4.88 The National Planning Policy Framework (NPPF) does not include any new waste policies, although requires local authorities preparing plans or taking decisions on waste applications to have regard to the policies in the NPPF so far as they are relevant.

3 The Landfill Directive 1999/31/EC

4 Waste collected by the Waste Collection Authority, including trade wastes and Civic Amenity wastes. Material that can be broken down usually by micro-organisms into basic elements. The government declared that municipal waste is 68% biodegradable. Calderdale MBC Waste Strategy, 2006. landfilled to 50% of that in 1995;

Current Position

4.89 The Local Plan is required to consider a number of different types of waste, Municipal Solid Waste (MSW), Commercial and Industrial (C&I), Construction, Demolition and Excavation (C,D&E), Agricultural, and Hazardous.

4.90 Data on waste types other than Municipal Wastes continues to be difficult to collect, although the information provided by the Environment Agency's Waste Data Interrogator has improved the situation greatly.

Municipal Waste

4.91 Municipal Waste is collected by SITA, via a contract that runs until 2015. SITA are also responsible for and owners of the waste that is brought to the Household Waste Recycling Sites (HWRS). Once collected, recyclable waste is bulked up at Halifax and Todmorden Waste Transfer Stations and transported out of the district to merchants or reprocessors.

4.92 The residual waste that is collected (black bag waste) is currently bulked up and transported out of the district to landfill. From 2016, the residual waste will be transported to a new facility in Bradford as a result of the Calderdale Bradford PFI waste partnership. The new facility will sort the waste again to extract any recyclable material prior to gaining energy from the remaining waste.

4.93 The latest figures show that in the period April 2011 to March 2012, the total Household Waste arisings in Calderdale amounted to 82,622 tonnes [(5)]. Levels of Household Waste sent for Recycling,Composting, and Reuse during the same period were 37,026 tonnes [(6)]. A total of 127 tonnes were sent directly for Energy Recovery, 37,744 tonnes were disposed of in landfill, and 7,725 tonnes were classed as being disposed of via other disposal routes [(7)].

Commercial and Industrial Waste

4.94 Latest estimates of the levels of Commercial and Industrial (C&I) Waste Arisings within Calderdale are based on a study published in 2009 [(8)], which estimated that in 2011, the levels of C&I waste within Calderdale would be 217,199 tonnes, falling to 199,600 tonnes by 2029. According to a more recent study by Defra, nationally, levels of C&I waste have fallen by 29% since the last National study was carried out in 2002/3. It is also estimated that 52% of C&I waste was recycled or reused in England in 2009. Whilst there is no data broken down to Local Authority level in the Defra report, estimated figures for Yorkshire & Humber suggest the region produced 6, 944,000 tonnes of C&I waste in 2009, compared to the Urban Mines Report which estimated the figure was 9,441,843. The Defra report does not include any projections for future arisings.

Construction Demolition & Excavation Waste

4.95 Data on Construction, Demolition and Excavation (C, D,& E) Waste is not readily available at a local authority level. The most recent estimates below a national level are within a 2010 report[(9)] which estimated that in the Yorkshire & Humber, CD&E waste arisings were 4,702,297 tonnes in 2007. At a West Yorkshire level, the CLG estimated that in 2005 the sub region 3,463,198 tonnes.[(10)] A recent national level study[(11)] estimated that around 85% of CDEW is either recovered or beneficially reused without further processing. It is estimated that by 2029 C,D&E waste arisings will be approximately

5 Waste Data Flow Website, Percentage of Household Waste Arisings sent for Recycling
6 Waste Data Flow Website, Percentage of Household Waste Arisings sent for Recycling
7 Waste Data Flow Website, Percentage of Household Waste Arisings sent for Recycling
8 Urban Mines Yorkshire & Humber Commercial & Industrial Waste Projections 2006 - 2026
9 Draft Waste Data Modelling Project, Yorkshire & Humber Region, Environment Agency, February 2010.
10 Survey of Arisings and Use of Alternatives to Primary Aggregates in England, 2005: Construction, Demolition and Excavation Waste (DCLG, 2007)
11 Construction, Demolition and Excavation Waste Arisings, Use, and Disposal for England 2008, WRAP.

151,978 tonnes, based on growth rates applied during the preparation of the RSS and the calculations set out in the Waste Data Evidence Report (Update September 2012).

Hazardous Waste

4.96 According to the Environment Agency, Calderdale produced 9,562 tonnes of hazardous wastes in 2010, although only a small proportion (2,427 tonnes)was treated within the district.

Agricultural Wastes

4.97 The majority of this particular type of waste tends to be dealt with either on site or is fed into the C&I waste stream. There are no estimates available for future levels of Agricultural waste.

4.98 Overall, there is a maximum 650,000 tonnes permitted Capacity in Calderdale in terms of Waste Recycling, Recovery and Treatment Facilities. However, not all of this capacity is suitable to accommodate the bulk of waste arisings in Calderdale, for instance 24 waste treatment sites are classed as Metal Recycling Sites, which amounts to 395,000 tonnes of capacity or 61%. Only 15% of the total inputs into permitted waste treatment facilities were deposited into Metal Recycling Sites, and when comparing all recorded inputs to any type of waste facility, they represented just 3% of total inputs. Other permitted facilities recorded inputs leave a large amount of spare capacity as well, indicating that the types of existing capacity is not matching the types of waste created.

Current Waste Infrastructure

4.99 Within Calderdale, there are the following Permitted Waste Facilities:

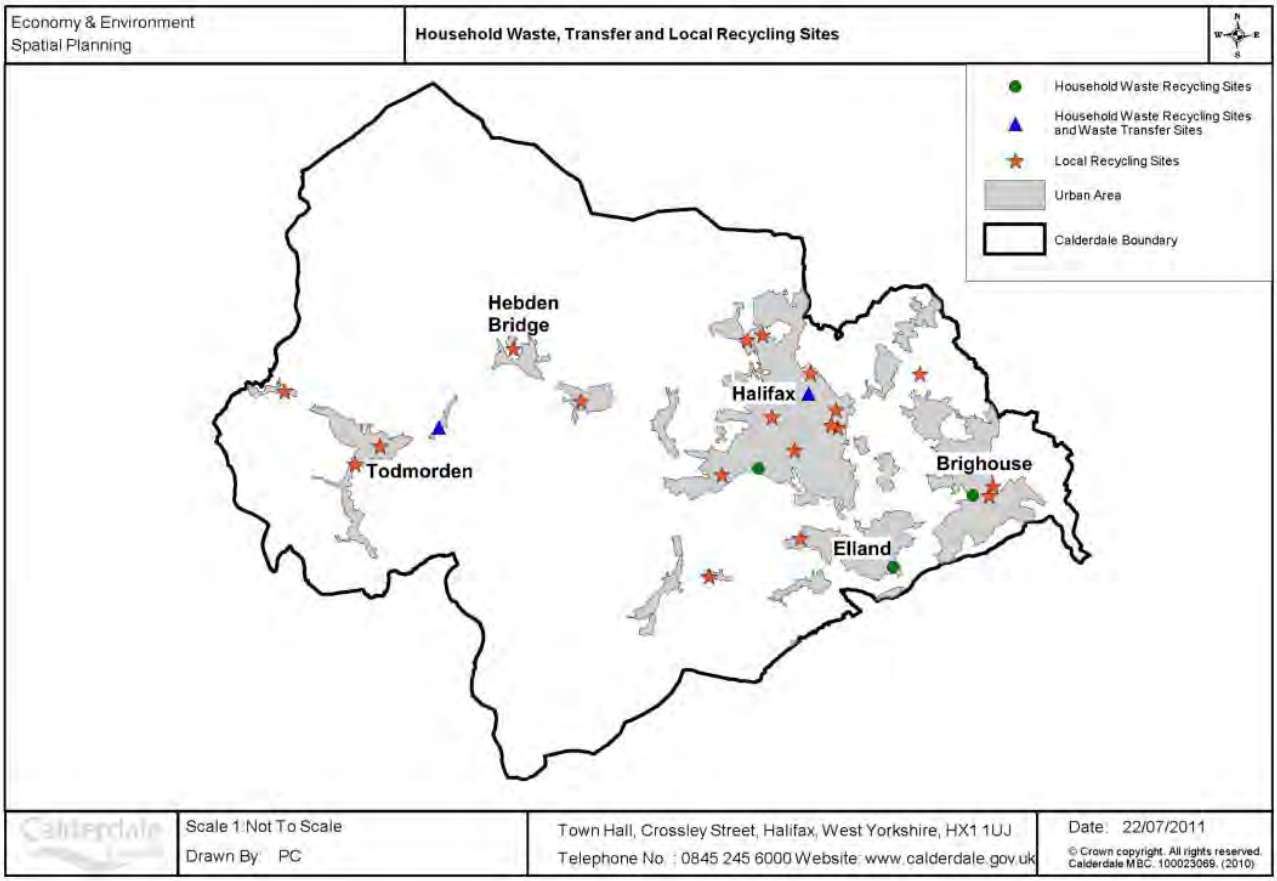
Table 4.4 Permitted Waste Facilities

Facility Type	Number
Landfill Inert	9(1)
Household Waste Sites / Transfer Stations	23(2)
Waste Treatment Operations	30(3)
Incineration	1

1. 4 of which are classed as non operational
2. 1 of which is non operational. These include skip hire facilities. Both Halifax and Eastwood HWRS are also included as both a HWRS and a Waste transfer station
3. 2 of which are non operational

4.100 There are two Waste Transfer stations, at Lee Bank in Halifax, and Eastwood, Todmorden. There is also planning permission for a waste transfer station at Pellon Lane, Halifax, which is due to become operational in 2013. The Transfer stations bulk up the household waste prior to sending to landfill and waste merchants. Both the Halifax and Eastwood Transfer Stations also act as Household Waste Recycling Sites (HWRS). There are also a number of ‘bring’ recycling sites at Supermarkets, car parks etc, and the distribution of these, along with the HWRS are shown on the Map below.

Map 4.10 Household Waste, Transfer and Local Recycling Sites



Future Needs

Future Waste Arisings

4.101 The Core Strategy Preferred Options presents a set of projected waste arisings for different waste streams. By 2029, MSW levels are projected to be 86,252 tonnes per annum, and C&I waste levels are projected to be 199,600 tonnes per annum. Estimates for future C,D& E waste arisings are to be treated with caution, however by 2029 it is estimated that 151,978 tonnes of C,D&E waste will be produced by Calderdale. In terms of Hazardous wastes, the latest projections estimate that by 2029 there will be 10,015 tonnes. There are no available projections at present for Agricultural waste.

Future Capacity Requirements

4.102 There were 2 scenarios presented in the Core Strategy RI&O consultation in January –March 2011 concerning the number of additional waste facilities the district would require during the plan period. The first scenario suggested that up to 2 recycling / recovery facilities and 2 treatment facilities would be required, whereas the second scenario suggested that up to 3 recycling / recovery facilities and 2 treatment facilities would be required.

4.103 While the Core Strategy preferred options does not specify the number of additional waste facilities required, it does specify that against current capacity, by 2029 there will be a shortfall of 60,426 tonnes per annum of recycling and composting capacity for MSW and C&I waste, and a 10,213 tonnes per annum shortfall of MSW and C&I treatment capacity. If a zero landfill approach is adopted the predicted shortfall would increase to 60,113 tonnes.

4.104 In terms of CD&E waste capacity requirements, there appears to be sufficient capacity for the inert CD&E waste, but there may need to be additional capacity for non inert CD&E which is disposed of in landfill. Finally, in relation to Hazardous wastes, it is considered that the relatively small amounts produced in Calderdale will continue to be mainly dealt with at either a sub regional or regional level, due to the specialised nature involved in treating this type of waste.

Role / Potential Impact of the Local Plan

4.105 The Local Plan will be required to to put in place both strategic and site specific waste policies. The Core Strategy's role will be to identify suitable areas of search for waste sites, along with a criteria based policy for waste facility planning applications. The Land Allocations document will be required to identify any specific waste facility sites that are required in order to deal with the changing emphasis of managing wastes, moving from a landfill based strategy to a treatment based one.

Flooding, drainage and water quality

Responsible Bodies

4.106 The Environment Agency (EA) has permissive powers to maintain watercourses and flood defences. Calderdale Council is the Lead Local Flood Authority (LLFA) and is responsible for managing flood risk from ordinary watercourses, ground water and surface water.

Strategies, Plans and Programmes

4.107 The EA takes a strategic approach to flood risk management, assessing and managing it on a catchment basis. **The Calder Catchment Flood Management Plan (CFMP)** was produced by the EA and seeks a sustainable planning-led solution to flood risk management within the Calder catchment. The CFMP encompasses all of the Calder Catchment which covers an area of 945.5 km^2 and includes the Rivers Calder, Colne, Hebble, Ryburn and Holme.

4.108 The CFMP not only assesses how flood risk affects development issues but also social, economic and environmental aspects of the Calder Catchment. The CFMP provides a detailed study of the Calder Catchment and makes recommendations for future flood risk management which need to be taken into account by the future Calderdale Local Flood Risk Management Strategy.

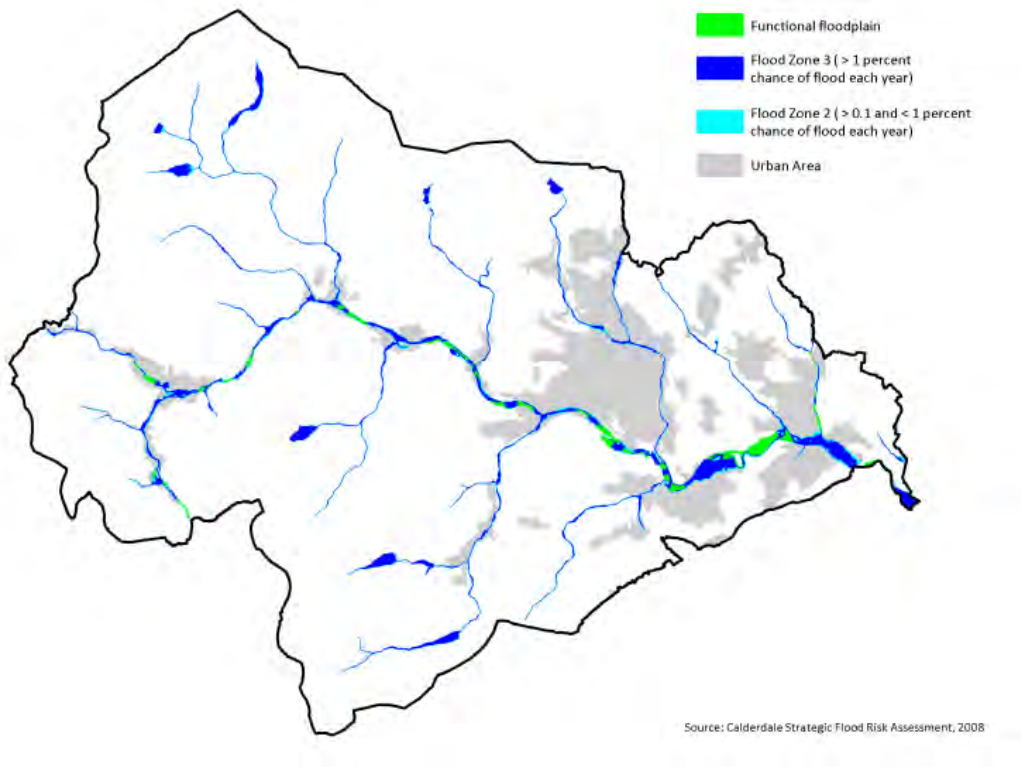
4.109 The NPPF emphasises the active role that LPAs should have in ensuring that flood risk is considered in strategic land use planning. It encourages LPAs to undertake SFRAs to be used as part of the documented evidence base required for the production of their Local Plan.

4.110 Calderdale Council, in conjunction with Kirklees and Wakefield Council, has carried out a Strategic Flood Risk Assessment (SFRA) (November 2008) to determine the variation in flood risk throughout the Calder Catchment. The SFRA is primarily a reference document for planners and developers and will inform flooding policies in the Core Strategy and subsequent DPDs.

4.111 The Replacement Calderdale UDP provides extensive “saved” policies regarding management of flood risk.

Flood Risk and Drainage in Calderdale

Map 4.11 Flood Risk in Calderdale



4.112 In the upper reaches of the Calder catchment and its many tributaries, valleys are generally narrow and steep sided and consequently flood zones are narrow. Typical flooding occurs in the valley bottoms when rivers come out of channel or when high river levels prevent discharge of surface water. Existing development is mostly housing, commercial or small areas of light industry.

4.113 Flooding caused by groundwater has not been identified as a significant problem due to the geology in the locality. The geology of Calderdale includes Lower Carboniferous rocks outcropping at the surface, these being overlaid in areas by more recent drift material, peat on the uplands and sands and gravels in the valley bottoms, particularly in the east of the District. The Carboniferous strata are typified by an ever-changing succession of sandstones, gritstones, shales and mudstones.

4.114 A feature of the Calderdale area is steep topography which is an underlying reason for the dispersed nature of flooding areas, except in the valley bottoms. Therefore surface water flood events across Calderdale tend to be numerous but generally tend not to have a serious or lasting impact on people or infrastructure. This however is not always the case, and in a small proportion of instances, there have been serious impacts to both people and infrastructure.

4.115 Where present flood defences typically consist of discontinuous flood walls in mixed condition, the standard of flood protection is typically low and mostly less than 25 years. The condition of defences exposes them to risk of failure in extreme flood events. The capacity of structures such as culverts and bridges also contributes to flood risk, as does the tendency for course sediment to accumulate at structures and in certain reaches. In many areas flood risk is considered to be very high with estimated flood depths of up to 3m not uncommon in zone 3a areas.

4.116 Effective flood risk management is achieved partly by avoidance of inappropriate development in high risk zones. This should take priority over substitution of lower vulnerability infrastructure where avoidance is not possible. Where avoidance or substitution is not possible the mitigation of the risks through a variety of techniques should be undertaken.

Planned Provision

4.117 The Environment Agency commissioned the Upper Calder Improvements Strategy in 2000 and the first revision of the final strategy was completed in January 2001. The strategy has been updated a number of times since then with the latest revision being completed in July 2004. The strategy involved a detailed investigation of flood risk across the main rivers and tributaries of the Calder catchment upstream of the River Colne confluence. Flooding history, catchment hydrology, existing defences, past studies and existing strategies fed into an investigation of policy options and economic appraisal. This process delivered a number of recommended flood defence schemes and other measures to manage flood risk. Flood defence schemes are recommended at the following locations:

- Todmorden (phase 1 & 2 constructed in 2006)
- Brighouse
- Tenterfields
- Hollas Bridge
- Hebden Bridge
- Clifton Beck
- Sowerby Bridge
- Mytholmroyd

4.118 Other measures recommended include:

- Short term reinforcement of informal, non Agency owned/maintained defences (including filling of gaps in defences)
- Improved flood warning provisions
- Improved public awareness of the high flood risk experienced in the upper Calder
- En-maining of critical ordinary watercourses to strengthen the Agency's regulatory powers
- Adoption of sustainable urban drainage systems on all new and brownfield development
- Identification of sites susceptible to sediment deposition (shoal formation) and formalisation of sediment extraction programme
- Comprehensive inspection/survey of defences
- Assessment of contribution of sediment from Hebden Water and consideration to the construction of a boulder trap.

4.119 The strategy is likely to be updated following the completion of the River Calder CFMP.

Role / Potential Impact of the Local Plan

4.120 The Core Strategy will ensure that flood risk associated with new development is considered both when land is allocated for new development and in development management decisions, in accordance with the NPPF and Policy ENV1 of the Regional Spatial Strategy.

Water Quality

4.121 Directive 2000/60/EC the **'Water Framework Directive' (WFD)** is European water legislation that applies to surface water and groundwater. The Environment Agency is responsible for delivering WFD requirements in England and Wales in partnership with communities and co-deliverers, including local government. WFD requirements are delivered through River Basin Management Plans (RBMP).

4.122 WFD objectives are to prevent deterioration of waterbodies and to improve them such that they meet the required status for the given waterbody. The term waterbody applies to rivers, lakes, estuaries, coastal and groundwaters. Under WFD, waterbodies are required to achieve 'good status'. However, where waterbodies have been altered by human activity they may be classified as Heavily Modified (HMWB) or Artificial (AWB) and therefore have an objective to achieve 'good potential'.

5 Social infrastructure

5.1 Social infrastructure is about the services and facilities required to make a place function.

Education

Schools Infrastructure

5.2 **Introduction**

5.3 Schools form a vital part of the local infrastructure of an area. The provision of sufficient school places for the local population, and the maintenance of school facilities to a suitable condition, are both crucial factors to consider in the long term planning of infrastructure.

Current position – Governance/Responsible bodies

5.4 Calderdale Council is currently responsible for the majority of schools within the district, however the Coalition Government's policies on encouraging more Academies and Free Schools mean that an increasing number are being transferred away from local authority ownership. However, regardless of how many schools eventually move out of local authority control, Calderdale Council will retain a statutory duty to commission school places and ensure that there are sufficient school places in the right areas to meet the needs of the local population.

Current position – Provision

5.5 As of January 2012 there were a total of 98 schools in the district, a mix of community, foundation, voluntary-aided and voluntary controlled schools. There are 84 junior, infant and primary schools and 14 secondary schools. As at October 2012 there are 20 fully converted academies with a further 4 schools having applied to the Department for Education (DfE) for Academy status with a decision or conversion pending.

5.6 A significant construction project is currently underway in north Halifax to provide a new facility for the Trinity Academy to accommodate up to 1,500 secondary pupils. Calderdale Cabinet agreed to further expand this new facility in November 2011 to accommodate an additional 400 students as a result of the planned closure of St Catherine's Catholic High School in August 2013. The first phase of the new Trinity Academy is open with the final stage due to be completed for September 2013.

5.7 The additional extension to the Trinity Academy building is funded through a Department for Education grant for secondary provision of £7.25m. This money will also help to provide additional accommodation for Ravenscliffe School (16-19 year old) at Spring Hall, and help to increase the capacity to meet the needs of vulnerable young people to be educated in Calderdale by redesignating the Council's Pupil Referral Unit (PRU) to a Behavioural, Emotional and Social Difficulties (BESD) special school, incorporating a PRU.

Future Needs / Strategies of Relevance

5.8 Calderdale Council produces a 'Planning for School Places' document annually, highlighting projections for pupil place need in each area of Calderdale showing existing school places alongside the anticipated new demand for places. It incorporates live birth rate data supplied annually by the Primary Care Trust (PCT) and also projected additional demand for places from new housing development. Migration cannot be accurately predicted and is not factored into the projections although anecdotal evidence identifies which schools are affected and how significant an impact this is for individual schools.

5.9 The use of live birth rate data gives a lead in time of 4 years for planning primary school places. Naturally a much longer lead in time exists for planning secondary school places. The 'Planning for

School Places' report is the main tool used for identifying and planning the requirement for new facilities.

5.10 The schools Capital Programme consists of a 'Statement of Priorities' presented and agreed on an annual basis to Cabinet around September/October time. The annual budget for this currently stands at £4m. Learning Services are responsible for looking at the quality of education provision including the state of facilities and therefore the work programme.

5.11 With the termination of the Building Schools for the Future (BSF) programme by the Coalition Government, Calderdale Council put forward bids for Private Finance Initiative (PFI) funding to progress rebuilding of Calder High and Todmorden secondary schools plus Moorside Primary school due to the very poor state of these facilities. The Council submitted their bids in September 2011 however none proved successful and it will be a number of years before any further funding is invested into the Priority School Building Programme (PSBP) by central Government.

Role / Potential Impact of the Local Plan

5.12 Any future housing development will clearly have an impact on the demand for school places in Calderdale. The current situation with regards to school planning and Government reforms is very fluid. There are signs that significant pressures that already exist within the school planning system could reach a critical point in the next couple of years; budgetary scenario, increasing population, changes in governance models etc. Within the context of these pressures the Council has a statutory duty to ensure that pupils have access to a school place within a reasonable distance; 2 (under 8's) or 3 miles (over 8's) walking distance of their home.

5.13 The Department for Education (DfE) produce figures on the cost per school place (for both primary and secondary provision) to a local authority. National figures are produced and an area multiplier is applied to factor in regional variances and give a more specific local cost.

5.14 Indicative building costs for a small 2-classroom primary school expansion would be approximately £[1]/4m to accommodate 60 pupils. In practice however project costs are generally much higher as it is seldom the case that a two classroom extension can be added without the need for associated work. The practicalities of class organisation within schools mean that an expansion would generally consist of a minimum additional four classrooms (half a form of entry). Standard class sizes consist of 30 pupils and although it is possible to mix age groups to make up a class of 30 from two different year groups, it is impractical to teach more than two year groups in the same classroom at the same time. Hence to expand a school by half a form of entry (half a class for each of 7 year groups) four classrooms are required. For a full form of entry 7 classrooms are required.

5.15 Examples of associated works consist of the addition of circulation space (link corridors to any additional classrooms), additional toilet facilities, and dining and sports facilities. The infrastructure of the existing provision may need to be upgraded to accommodate the additional demand. Gas, and electricity supplies, and water and drainage provision very often require significant investment to facilitate the expansion of schools.

5.16 The impact of additional pupil numbers cannot therefore be understated.

5.17 In terms of the pupil yield arising from new housing, a figure of 0.36 pupils per new dwelling is used. This figure is over 30 years old and based on a historical national average. It is recognised that a more reliable local indicator would be beneficial. In the past this has been the best figure available, and is still referenced in the Council's SPD on Education Provision. It may be possible to research whether Census data would provide a more accurate, local measure for Calderdale in the context of the Local Plan.

5.18 Central Government 'basic need' funding is provided to help assist local authorities in creating additional school places. This is based upon an assumed need for places due to increases in birth

rates resulting in additional pupil demand above the borough wide capacity for accommodating pupils. This does not recognise that empty school places may not be in the right place to meet local pupil demand and funding therefore does not address the real issue. Nor does funding allow for new housing development where it is expected that developer contributions will fund additional school places.

5.19 A minor capital repairs budget is available for maintaining schools. It must be emphasised that this is purely for maintenance and does not facilitate a rolling programme of school renewal. The department is very keen to see education provision included within any CIL charge for Calderdale to ensure that there are sufficient places to meet additional demand arising from development and that provision is based in schools that are in an acceptable condition and fit for purpose.

5.20 Where CIL is considered for education, contributions should be based on the size of dwelling and include apartments (though not 1-bed apartments) as the Council's current SPD does not differentiate between 2 and 5-bed housing for example. The resultant pressure on school services is generally going to be significantly higher from a 5-bed house than a 2-bed house.

5.21 The schools service is keen to be kept informed of the development of the Local Plan, particularly in relation the development of a CIL charging schedule for Calderdale.

5.22 Table 5.1 'Indicative requirements for new educational infrastructure' sets out the indicative requirements for new school places as a result of the growth requirements set out in Table 3.3 'Growth implications for Calderdale settlements'. Requirements for the number of new/expanded schools are based on a high level assessment of existing provision/under provision, are rounded to the nearest 0.5 form entry, and the assumption that no primary school should be larger than 2 forms of entry in size.

5.23 Where new schools or expanded schools are highlighted as being required these are detailed in the Infrastructure Delivery Schedule, 'Social infrastructure', along with broad estimates of the cost implications of schemes. Where there is no specific requirement for new or expanded schools identified (Ripponden/Rishworth, Holywell Green & Stainland and Southowram) the education service would look for contribution based costs in the region of £12,355 per individual primary school place, and £18,469 per secondary/6th form place.

Table 5.1 Indicative requirements for new educational infrastructure

Settlement	Proposed new Housing (max no.)	Primary school places	Secondary school places	6th Form school places	Primary forms of entry	Secondary forms of entry	New Primary schools	New Secondary schools	Expanded Primary schools	Expanded Secondary schools
Halifax	5,030	1,057	755	302	5.5	7.5	3	1	-	-
Brighouse	2,100	441	315	126	2.5	3.0	2	1	-	-
Elland	1,050	221	158	64	1.5	1.5	1	-	-	1
Todmorden	630	133	95	38	1.0	1.0	1	-	-	1
Sowerby Bridge	840	177	126	51	1.0	1.5	1	-	-	1
Hebden Bridge	252	53	38	16	0.5	0.5	-	-	1	1
Mytholmroyd & Luddendenfoot	158	34	24	10	0.5	0.5				
Ripponden / Rishworth	46	10	7	3	0.5	0.5	-	-	-	-
Holywell Green & Stainland	17	4	3	2	0.5	0.5	-	-	-	-
Southowram	12	3	2	1	0.5	0.5	-	-	-	-
Northowram & Shelf	368	78	56	23	0.5	1.0	-	-	1	1

Health

National Guidance

5.24 There is no specific national planning policy guidance or statement that deals specifically with health. However, this is likely due to the fact that health issues cut across many other planning policy topics, including transport, housing, waste, open space, sport and recreation, flooding and climate change.

5.25 Although this section on health focuses on infrastructure that is necessary to treat health problems, infrastructure relating to maintaining and improving health is addressed in a number of other sections in the document.

Current Position – Governance

5.26 There are different types of health facilities referred to in this section, Primary Care, Secondary Care, and Mental Health Care, all of which are managed by different organisations within the NHS. Primary care generally refers to services provided in the first stage of treating an illness, such as GPs, Dentists, Pharmacists, health visitors and district nurses. Secondary care refers to the second stage of treatment of illness and is generally delivered by Hospitals.

5.27 NHS Calderdale is the Primary Care Trust (PCT) in Calderdale and has responsibility for all NHS services that are provided in the district, and works closely with doctors, dentists, opticians, pharmacists, local hospitals and social services, making sure that services are accessible, of high quality, and safe[12]. The PCT's vision [13] is as follows:

- Help improve the health of people in Calderdale and reduce inequalities in health;
- Improve the health services that people in Calderdale receive;
- Improve the working experience of our staff.

5.28 The local health services serve 200,100 people living in Calderdale, and employ over 600 staff, investing £300 million per year to improve the health of Calderdale's residents.

5.29 Calderdale and Huddersfield NHS Foundation Trust is in charge of the two main hospitals in Halifax and Huddersfield, Calderdale Royal Hospital and Huddersfield Royal Infirmary, as well as providing outreach services to local communities. The Trust provides healthcare for more than 435,000 people across Calderdale and Kirklees. [14].

5.30 The South West Yorkshire Partnership – NHS Foundation Trust provides a range of community, mental health, and learning disability services to Calderdale, Barnsley, Kirklees and Wakefield. Services are provided in a variety of locations, including hospitals, GP surgeries, health centres and community buildings, as well as with people in their own homes. [15]

Changes to Governance and the NHS Structure

5.31 In the current system, Primary Care Trusts are the most relevant body in terms of Spatial Planning and the NHS. However, the Government published a White Paper in July 2010 – Equity and Excellence, Liberating the NHS. The White paper set out the government's plan to "put patients at the heart of the NHS, through an information revolution and greater choice and control". Subsequently, the 2012 Health and Social Care Act stated that Primary Care Trusts will be abolished by March 2013, with the responsibilities being taken up by four different bodies. Most of the public health responsibilities will be taken up by Calderdale Council, some will be taken up by the new NHS Calderdale Clinical

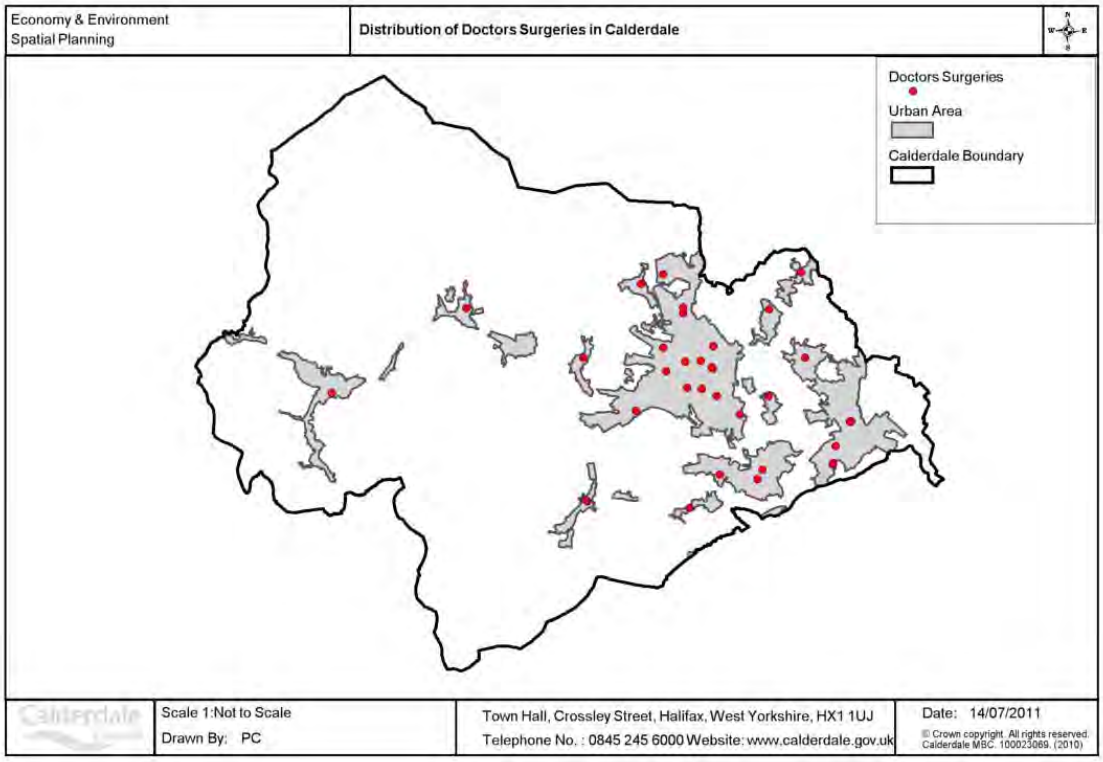
12 http://www.calderdale.nhs.uk/about-us
13 http://www.nhs.uk/Services/Trusts/Overview/DefaultView.aspx?id=3505
14 http://www.cht.nhs.uk/about-us
15 http://www.southwestyorkshire.nhs.co.uk/about-us/our-services

Commissioning Group, with the remainder transferring to two other new national bodies, the NHS Commissioning Board and Public Health England [16].

Current Position – Provision

5.32 Within Calderdale, there are 27 general practices with 112 doctors, 33 dental practices, 40 pharmacies, 34 optometrists, and one hospital trust [17]. According to the Department of health's information centre for health and social care statistics, in 2010, there were 201,672 persons registered with GPs operating in Calderdale; of these, around 98,000 were male and 103,000 were female.

Map 5.1 Distribution of GP Surgeries in Calderdale

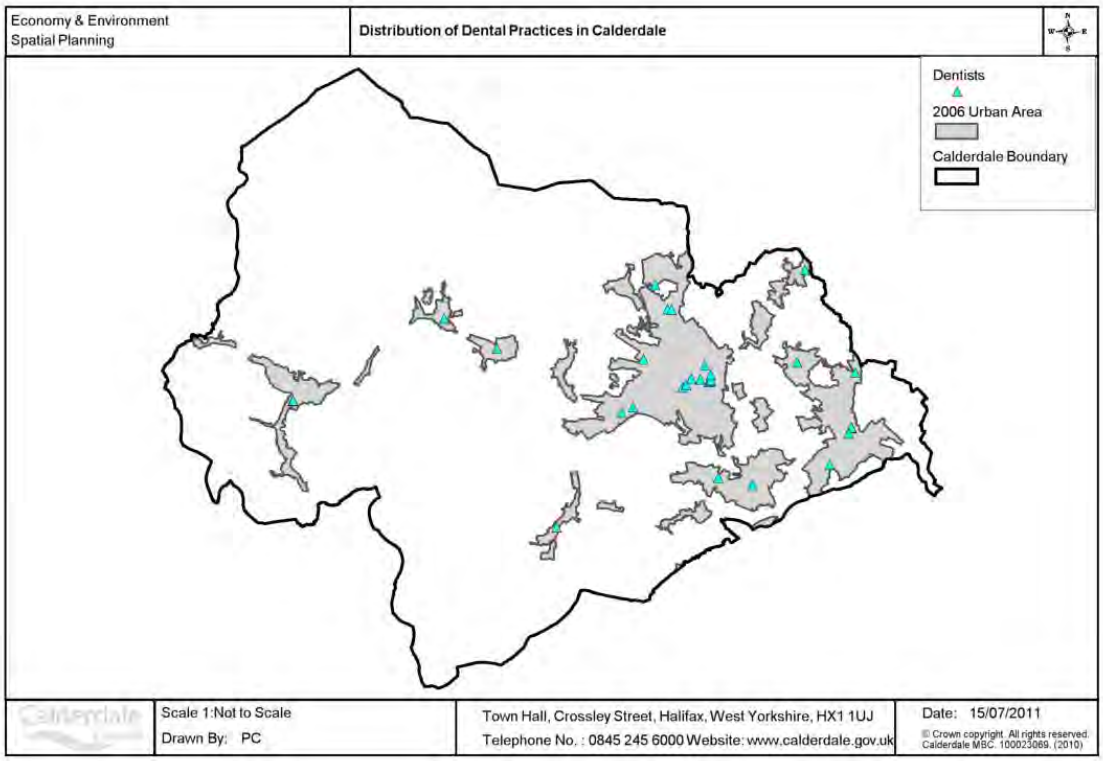


5.33 The greatest number of doctors surgeries lie within the Halifax, whilst a number of smaller urban areas have a single facility. This is slightly misleading within Todmorden, which now has a new Health Centre, opened in March 2009. This 'Walk in Centre' offers a range of services and serves the Upper Calder Valley. Services include clinics and treatment Rooms, two local GP practices, and a host of community services.

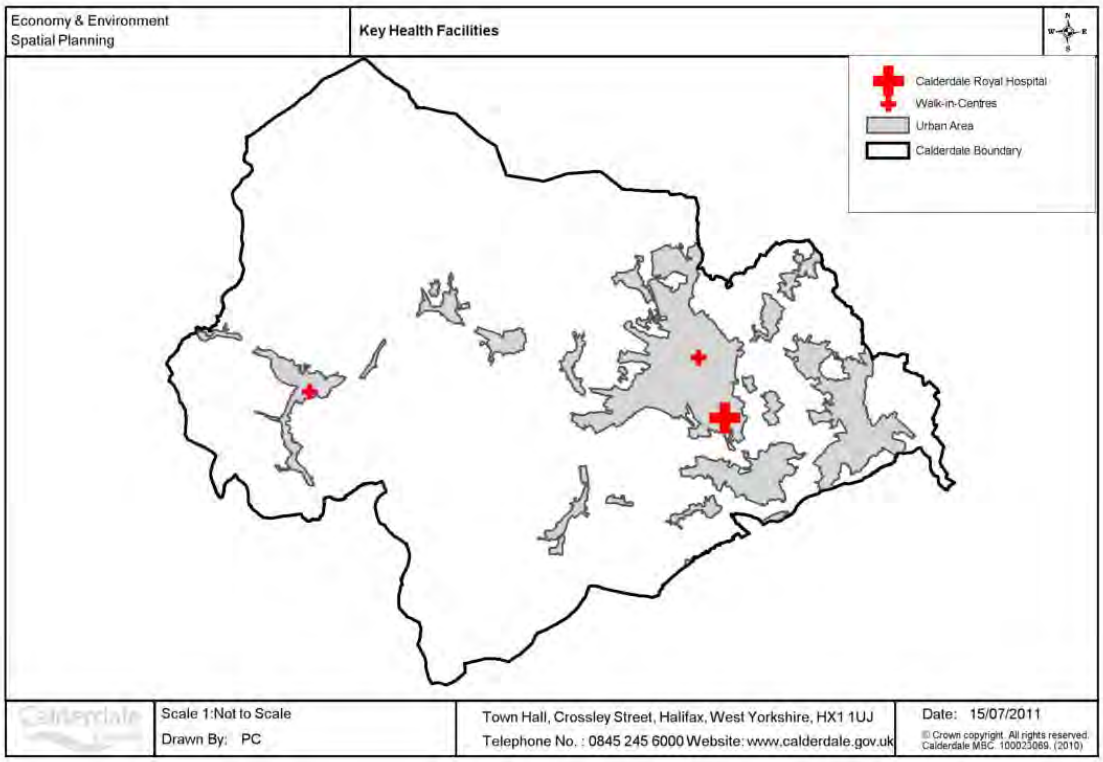
5.34 The following maps show the distribution of dental practices and key health facilities respectively. Again, the greatest number are within Halifax.

16 Director of Public Health, Annual Health Report for Calderdale 2012, NHS Calderdale, Calderdale Council 2012
17 http://www.calderdale.nhs.uk/about-us

Map 5.2 Distribution of Dentists in Calderdale



Map 5.3 Distribution of Hospitals and Walk in Health Centres in Calderdale



Future Needs / Strategies of Relevance

5.35 Growth Projections are for population to increase by 16% between 2009 and 2033, with significant increase in ages 65-74 (37%) and 75+ (46%). The effect of these changes could lead to additional pressure on the NHS. In terms of future needs, there is no definite indication of additional infrastructure the NHS is seeking. The most relevant strategy in terms of the Local Plan is the local NHS Estates Strategy. The most recent Estates Strategy was published in 2005, and is in the process of being reviewed. However, given the uncertainty surrounding the exact nature of future NHS governance, it is not clear when this will be published, nor who will be responsible for doing so. As the Local Plan preparation progresses, regular updates will be sought from the NHS in terms of any further details concerning this.

5.36 One facility that is relocating into new premises is the Laura Mitchell Health Centre, currently at Great Albion Street in Halifax but moving to the Broad Street development in the centre of Halifax. This is due to open in 2012.

5.37 The Joint Strategic Needs Assessment (JSNA) which is prepared jointly by NHS Calderdale and the local authority identifies the current and future health and wellbeing issues of the local population. The latest JSNA was published in November 2011.

Role / Potential Impact of the Local Plan

5.38 The Local Plan will have a significant role and impact on the future infrastructure needs of the NHS. It will be necessary to co-ordinate future development as closely as possible in order to match services with need. The NHS will be kept informed of any future consultations in order that they can continue to contribute to the Local Plan process, and as the future governance arrangements become clearer discussions will continue in terms of the future Estates Strategy. Future housing growth across Calderdale may provide opportunities to secure additional health facilities and services in the district.

Community and culture

Community Infrastructure

5.39 Infrastructure classed as 'community' infrastructure in the context of the Calderdale Local Plan includes libraries, community centres and halls, post offices, cemeteries and heritage assets.

Library Infrastructure

Introduction

5.40 Libraries are a key part of community infrastructure, providing a wealth of services to local residents including: books, sound and vision loans; meeting rooms; reference resources; internet and wi-fi access; newspapers; schools resource services.

Current position – Governance/Responsible bodies

5.41 Calderdale Council is responsible for providing and maintaining all library provision around the district.

Current position – Provision

5.42 There are currently a total of 22 separate library buildings located around the district, with an additional reference and information library located within Central Library, Halifax, and 2 mobile libraries that concentrate on those who are housebound and in residential care.

5.43 The full list of current library facilities includes;

- Akroyd Library
- Bailiff Bridge Library
- Beechwood Road Library
- Brighouse Library
- Central Library, Halifax (includes a separate Reference & Information Library)
- Elland Library
- Greetland Library
- Hebden Bridge Library
- Hipperholme Library
- King Cross Library
- Mixenden Library
- Mytholmroyd Library
- Northowram Library
- Rastrick Library
- Ripponden Library
- Shelf Library
- Skircoat Library
- Southowram Library
- Sowerby Bridge Library
- Stainland Library
- Todmorden Library
- Walsden Library.

5.44 The hours of opening of facilities currently varies greatly with some of the smaller locations only being open for 8-10 hours per week. In recent years various work has been undertaken to ensure a high standard of provision is maintained.

- Brighouse, Hebden Bridge, Northowram and Rastrick libraries have all been refurbished;
- A brand new facility has been built at King Cross;
- The extension of Shelf Library into part of the village hall; and
- Bailiff Bridge integrated into a new community hall as a key anchor of the new facility.

Future Needs / Strategies of Relevance

5.45 Calderdale Council has recently undertaken a Library Review exercise in order to meet budgetary savings for the 2012/13 period and beyond. The review looked at the structure of library provision around the district and included a detailed public consultation exercise. Council agreed in January 2012 that;

- The mobile library service would be reconfigured to concentrate on those who were housebound and in residential care only (previously visited all areas of the district poorly served by fixed facilities);
- To reduce opening hours at a number of the fixed facilities: Beechwood Road, Brighouse; Elland; Hebden Bridge; Hipperholme; King Cross; Mixenden; Northowram; Rastrick; Shelf; Skircoat; Sowerby Bridge and Todmorden; and
- To create a programme of improvements comprising 5 key actions for each community library which would seek to develop interest from local people in the delivery of their library services with the aim of creating a new model of community library provision.

Role / Potential Impact of the Local Plan

5.46 Any future development will clearly have an impact on the demand for library services. Standards for library provision have been produced with varying levels proposed of between 25 and 35sqm per

1000 population. The Museums and Libraries Archives Council (MLA) recommend 30sqm in the Living Places toolkit (www.living-places.org.uk) produced with the Local Plan and CIL in mind. Benchmark construction and fit-out costs are also provided for assisting with a CIL charging schedule. A separate figure of 6sqm per 1000 population is recommended for new or refurbished archive space.

5.47 The libraries service is keen to be kept informed of the development of the Local Plan.

Community Centres and Halls Infrastructure

Current position – Governance/Responsible bodies

5.48 The various community centres and public halls that are currently located around the district are a combination of local authority run premises and privately or community owned facilities.

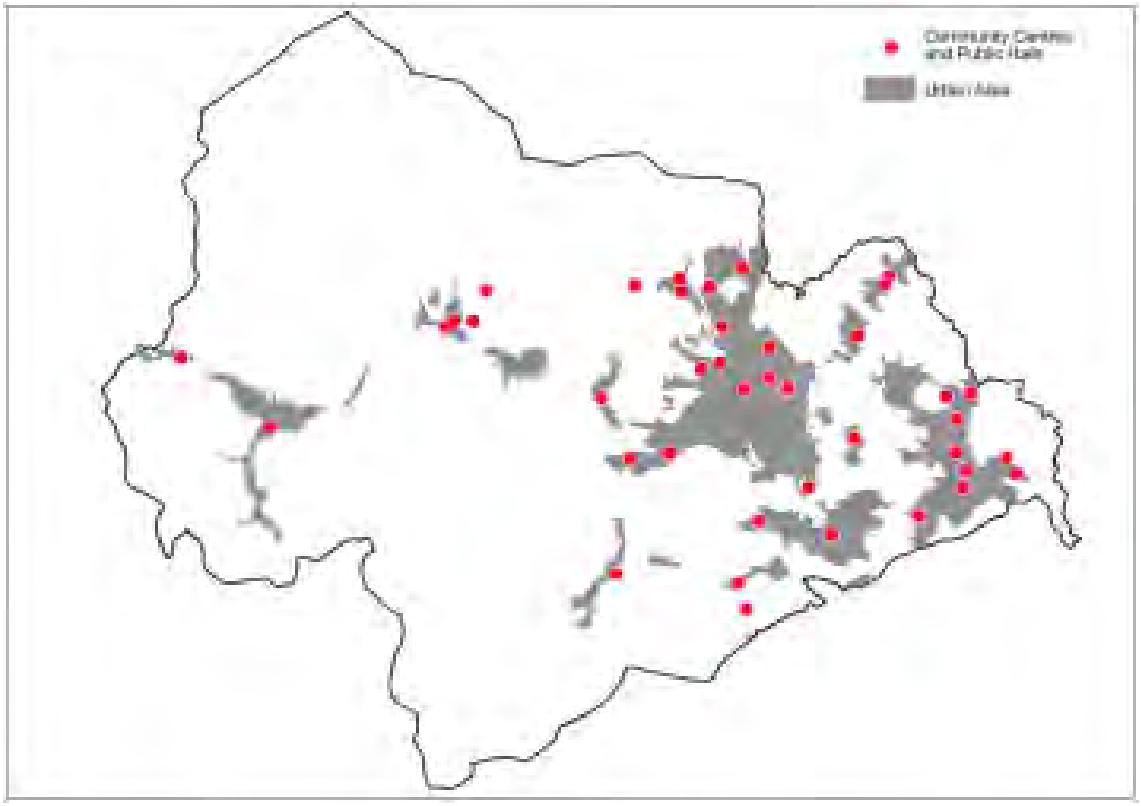
Current position – Provision

5.49 Calderdale Council run a total of 6 facilities available for hire by the public for private functions or community events:

- Brighouse Civic Hall
- Clay House, West Vale
- Luddenden Civic Institute
- Shelf Village Hall
- Todmorden Town Hall
- Wainwright Hall, Elland

5.50 There are approximately a further 40 facilities located around the borough, their locations are highlighted below.

Map 5.4 Community centres / public hall facilities



Future Needs / Strategies of Relevance

5.51 There are no known strategies of relevance relating to community centre or public hall provision at a strategic level in Calderdale.

Role / potential impact of the Local Plan

5.52 Where the Local Plan proposes significant new development over the plan period there may be a need for further facilities, however there are no known standards for community centre or public hall provision to help gauge this need. Government proposals through the Localism Bill support communities in taking over buildings exactly for this kind of use. Policies within the Local Plan will help to support provision and ensure that new facilities are multi-functional and could act as cultural hubs for the local community (enabling theatre production, exhibitions etc).

Post Office Infrastructure

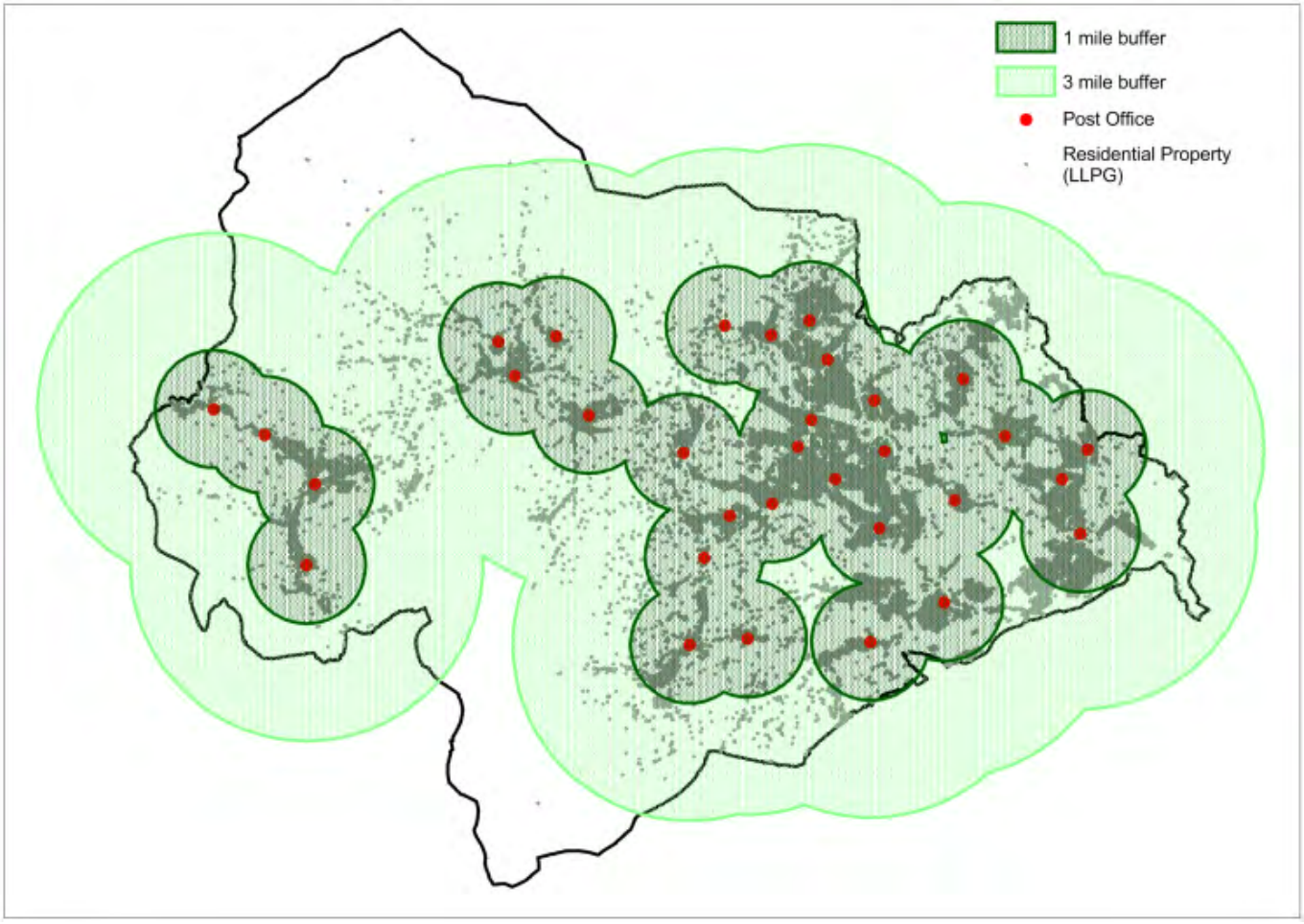
Current position – Governance/Responsible bodies

5.53 Post Office Ltd is a wholly owned subsidiary of Royal Mail Group Ltd. There are currently over 11,500 Post Office branches nationwide, offering more than 170 products and services to over 19million customer visits peach week. Only around 3% of post office branches are now directly managed by Post Office Ltd, the remaining branches are managed on an agency basis either by subpostmasters/mistresses or partners. More recently franchise partners have included companies such as Tesco and WHSmith and proposals to privatise the Post Office (see below) could see many more branches following this model.

Current position – Provision

5.54 In Calderdale there are currently 32 post office branches in operation across the district. Out of a total of 93,145 dwellings in Calderdale (LLPG record at 18th October 2011), 85,925 (92.2%) were located within 1 mile of their nearest branch; 93,135 (99.9%) were located within 3 miles of their nearest branch.

Map 5.5 Post Office locations and 1-mile and 3-mile catchment areas



Future Needs / Strategies of Relevance

5.55 The Post Office has very recently undergone significant structural change. The Network Change Programme was a Government led initiative, undertaken between October 2007 and March 2009, to modernise and reshape the network for a more secure and stable future. In total 2500 branches were closed across the country, including 11 closures in Calderdale.

5.56 Despite these closures, the Post Office applies the following minimum access criteria; Nationally:

- 99% of UK population to be within 3 miles and 90% to be within 1 mile of their nearest branch;
- 99% of the total population in deprived urban areas across the UK to be within 1 mile of their nearest branch;
- 95% of the total urban population to be within 1 mile of their nearest branch; and
- 95% of the total rural population across the UK to be within 3 miles of their nearest branch.

5.57 In addition, for each individual postcode district:

- 95% of the population of the postcode district to be within 6 miles of their nearest branch.

5.58 As demonstrated by the map in the Current Provision section above, in Calderdale these minimum access criteria are met across the district with only 10 properties (out of 93,145) being located further than 3 miles from a Post Office branch.

5.59 Further significant structural change is likely as a result of the Governments proposals to privatise Royal Mail and there have been warnings that up to a third of remaining branches may close. The

Postal Services Bill is currently in its final stages through Parliament, proceeding to 'Consideration of Amendments' stage at the end of May 2011. The Bill, and likely impacts of it to local services will be monitored as this infrastructure delivery plan is developed.

Role / Potential Impact of the Local Plan

5.60 The location of new development in the future will have an influence on the Post Office Group maintaining their minimum access criteria in the future. The anticipated number of new dwellings in Calderdale were (to some degree) taken into account during the Network Change Programme, even though locations were (are still are) unknown. Post Offices play a vital role in serving their local communities and this was clearly demonstrated by the strength of objection during recent closures. Therefore close monitoring of the Post Office network will be necessary in the light of future development and any potential further future branch closures as a result of privatisation.

Cemeteries Infrastructure

Current position – Governance/Responsible bodies

5.61 Calderdale Council is responsible for the majority of cemeteries across Calderdale. Churches across the district are responsible for their own churchyards until full, at which point the Council takes over their maintenance.

Current position – Provision

5.62 There are currently 7 municipal cemeteries across the district, all of which have ample space for the foreseeable future (35-40 year planning period) or are currently being extended to accommodate this period of need as at Stoney Royd (Halifax) at present. Municipal cemeteries are located at:

- Brighouse, Lightcliffe Rd;
- Clifton, Towngate;
- Elland, Exley Lane;
- Luddenden, Stocks Lane;
- Rastrick, Carr Green Lane;
- Sowerby Bridge, Sowerby Bridge New Rd; and
- Stoney Royd, Water Lane, Halifax.

5.63 There is currently no municipal provision in the upper valley, despite efforts for some years to acquire land for a facility. All cemeteries in the upper valley currently belong to churches, and the majority of these are coming to the end of their lives and reaching capacity. Already Calderdale has responsibility for maintaining 26 closed churchyards across the district.

5.64 In addition to cemeteries, Calderdale has a modernised crematorium facility at Park Wood, Park Road, Elland.

Future Needs / Strategies of Relevance

5.65 Recent efforts to create a facility at Lumbutts to serve the upper Calder Valley area has led to significant opposition. A solution to the lack of facilities in the upper valley will still need to be resolved and the long term strategy will be discussed at a future Safer and Stronger Communities Panel.

5.66 In terms of planning for future needs, the cemeteries service track mortality rates as opposed to looking at development and population increases. The death rate is predicted to increase significantly (by about 18%) over the next 5-7 years due to the population profile of the district. However recent modernising and extension work at the cemeteries and crematorium around the district is sufficient to cover the Local Plan period and beyond.

Role / Potential Impact of the Local Plan

5.67 Should the need for a facility in the upper valley be identified and required through Council then the Local Plan has a role to play in ensuring that a suitable site is protected for this use.

Cultural Infrastructure

Introduction

5.68 The cultural sector as a whole covers a wide variety of activities including; the performing and visual arts; creative industries; museums and galleries; built heritage; libraries; parks and playgrounds; sports; and cultural tourism. Cultural infrastructure in this context however (in terms of the Local Plan) is limited to Theatres/Cinemas, Museums and Galleries. Libraries, built heritage and parks and outdoor recreation are covered under separate sections of the infrastructure plan.

Current position – Governance/Responsible bodies

5.69 Cultural and Arts provision within Calderdale is a mixture of both public and privately run facilities and enterprise. The Council is responsible for a number of museums and galleries around the district and the Calderdale Cultural Partnership (established in 2008 as a sub-group of the Local Strategic Partnership) advised on issues relating to culture in the borough and co-ordinates activity at a strategic level to maximise the contribution of culture to the economic and social well being of Calderdale.

Current position – Provision

5.70 Current publicly run provision in Calderdale includes:

- The Victoria Theatre, Halifax;
- The Hebden Bridge Picturehouse;
- Shibden Hall Museum, Halifax;
- Bankfield Museum, Halifax;
- Heptonstall Museum;
- Smith Art Gallery, Brighouse;
- Piece Hall Art Gallery, Halifax;

5.71 Various privately run facilities such as the Ted Hughes Museum, the Toy Museum, Hardcastle Craggs, Eureka and other commercial galleries are also located throughout the district.

Future Needs / Strategies of Relevance

5.72 Both the Theatres and Museum service advocate a degree of flexibility in planning for the cultural sector. Where new community facilities are proposed then the use of any space for both performing arts and exhibition space should be considered. A very small investment could enable a more sustainable, multi-use facility. This is however primarily a policy issue, as opposed to a specific requirement on the infrastructure schedule and should be built into the Core Strategy.

5.73 Specific infrastructure points of note with regards to strategy/needs include:

Theatres

5.74 Both theatres currently run by Calderdale Council are at differing stages of a community asset transfer process. The Hebden Bridge Picturehouse is currently going through this process with a very active community expression of interest. The Victoria Theatre is going down a similar route in terms of the transfer of this asset outside of the Council, however the process is a very different one. The principal aim is to prove a sustainable future for the facility.

Museums

5.75 Bankfield Museum is currently in a poor state of repair with major works required such as a re-roof and electrical upgrade. Members are committed to undertaking this work, however there is currently no work programme scheduled. As an initial starting point to progressing works the Museums and Collections Strategy 2011-2014 sets out the intention to have outline costs and delivery proposals for works to be prepared during 2012. The retention of Bankfield museum in situ is particularly significant due to its location in a deprived area where there are generally few facilities for the local community.

Role / potential impact of the Local Plan

5.76 Cultural facilities are an essential component of sustainable communities. High quality, sustainable and well-located arts and museum facilities can help with delivering wider social aims such as improving well-being and enlivening the population. In addition they can act as important tourist attractions to communities all around, and outside of, Calderdale.

5.77 The Living Places project (www.living-places.org.uk) was set up by 5 of the leading cultural agencies; Arts Council England, the Commission for Architecture and the Built Environment (CABE), English Heritage, the Museums, Libraries and Archives Council (MLA) and Sport England. The sponsoring departments in government include the Department for Culture, Media and Sport (DCMS) and the Department for Communities and Local Government (DCLG).

5.78 The primary aim of the Living Places project is to ensure that all communities (particularly those experiencing housing-led growth and regeneration) can benefit from cultural opportunities by embedding cultural developments in villages, towns and cities alongside other key areas of infrastructure provision such as health-care and transport.

5.79 A toolkit has been produced detailing benchmark standards of provision for cultural services. Although the toolkit acknowledges that any local benchmarks should be supported by local evidence of need, and the derivation of local costs, these provide a potential starting point for negotiation with developers if considered as part of a CIL charging schedule.

- Galleries / Theatres / Performing Spaces - 45sqm per 1000 population of publicly owned and managed, or regularly funded, arts provision
- Museums – 28sqm per 1000 population

5.80 The toolkit also proposes construction and fit out costs for each typology for use in composing a CIL charging schedule when appropriate.

Emergency services

Emergency Infrastructure

Introduction

5.81 The three main emergency services in Calderdale comprise the West Yorkshire Police Authority, the West Yorkshire Fire and Rescue Authority and the Yorkshire Ambulance Service.

Current position – Governance/Responsible bodies

5.82 The West Yorkshire Police Authority (WYPA) have a key statutory duty to secure the maintenance of an efficient and effective police force in its area. This includes the publication of an annually rolling 3-year policing plan (consistent with the Secretary of State's Strategic Policing priorities), the monitoring of performance, and co-operation with the local authority in determining Local Area Agreements, amongst many other duties.

5.83 The West Yorkshire Fire and Rescue Authority (WYFRA) is responsible for the county's fire and rescue service, which serves a population of more than two million people.

5.84 The Yorkshire Ambulance Service (YAS) is responsible for providing emergency transport and care of patients in Calderdale, on behalf of the local Primary Care Trust (PCT), to meet patients' acute healthcare needs. Calderdale PCT commissions the YAS to provide this service, although other patient transport services do operate in the district for non-emergency transfers (for example for transport of patients to routine appointments etc.). The YAS are currently in the process of applying to become an NHS Foundation Trust that, if approved, will give the service more autonomy to make its own decisions about the way it provides, develops and invests in services and staff away from central government control.

Current position – Provision

West Yorkshire Police Authority

5.85 The West Yorkshire Police Authority currently has a total of 7 police stations around the district. These are located in Halifax (2 separate stations in central and north (Ovenden) locations), Brighouse (1 stations split between Thornhill Villas and 1 Woodvale Rd), Elland, Sowerby Bridge, Hebden Bridge and Todmorden.

West Yorkshire Fire and Rescue Authority

5.86 The WYFRA currently has 6 fire stations located across Calderdale. In the upper valley there are stations in Todmorden and Mytholmroyd; Halifax has two stations at King Cross and Illingworth; and both Elland and Brighouse have their own stations serving the lower valley areas.

Yorkshire Ambulance Service (YAS)

5.87 The YAS currently has 3 main ambulance stations in Calderdale; Halifax (4 ambulances and 3 cars), Brighouse Station (3 ambulances and 2 cars) and Todmorden station (1 ambulance and 1 car). A further smaller facility is in use at King Cross Fire Station in Halifax. This location provides an additional base with appropriate facilities for running local services. A similar small facility at Illingworth fire station is currently being looked at to serve the North Halifax area.

5.88 In terms of service provision, the culture is currently to use A&E departments as a last resort. Other pathways to relevant care are given priority and indeed wherever possible efforts are made to keep patients in their own homes following call-outs.

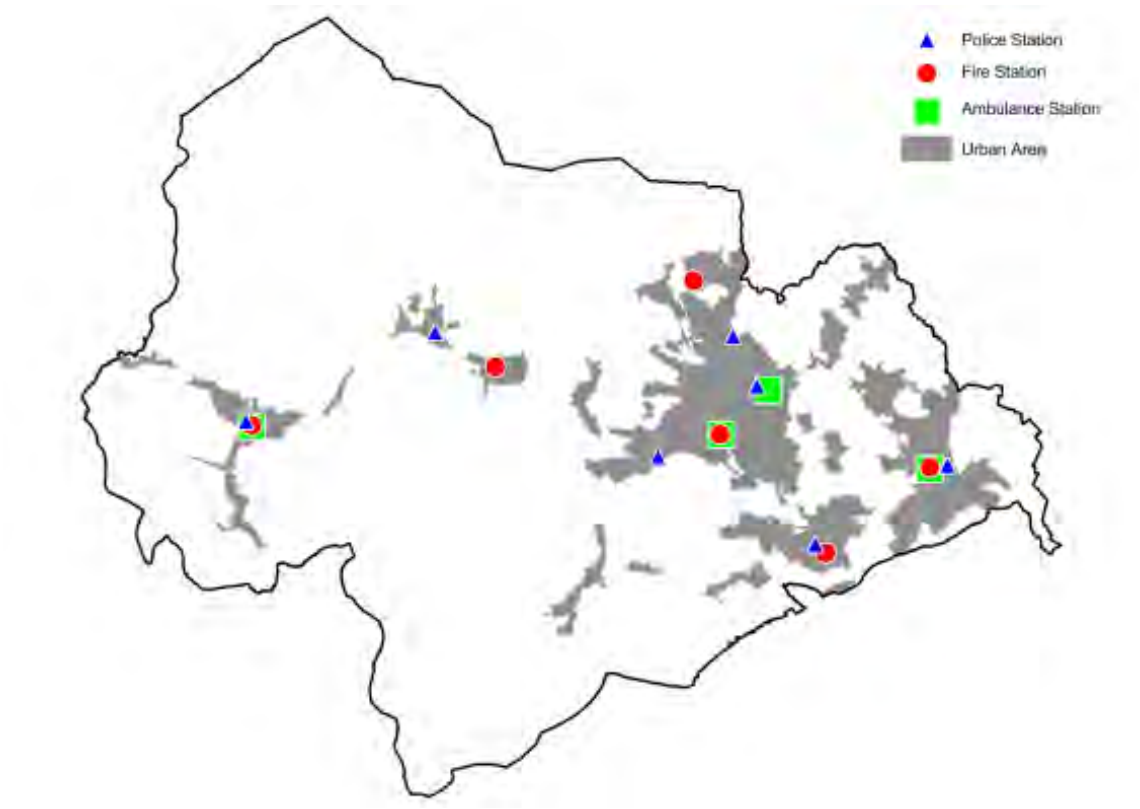
Future Needs / Strategies of Relevance

West Yorkshire Police Authority

5.89 The WYPA are having to undertake significant restructuring in line with other public sector bodies in light of government austerity measures. The West Yorkshire Policing Plan 2011-15 sets out the strategic priorities for the police authority, one strand of which (Strand 4) is 'Transforming the Organisation'. During the 2011/12 period a process of planning estates asset rationalisation is planned. The policing plan also refers to a specific Force Estate Strategy.

5.90 On an ad-hoc basis, asset management teams and blue light services from across West Yorkshire meet for partnership working and information sharing. Information received at these meetings will be fed into this Infrastructure Delivery Plan where appropriate.

Map 5.6 Emergency Services Infrastructure



West Yorkshire Fire and Rescue Authority

5.91 The Government introduced Integrated Risk Management Planning (IRMP) in 2004 to replace National Standards of Fire Cover. This change moved the focus of emergency cover from buildings to people. The aim of IRMP is to improve community safety, reduce emergencies and provide value for money, with the continuous process of aligning the available resources to risk and demand.

5.92 West Yorkshire Fire Authority have already begun to implement changes to emergency cover in Calderdale, with the merger of Elland and Brighouse fire stations as part of IRMP Action Plan 2012/13. As part of the consultation document on 'Proposals for Changes to Emergency Cover in West Yorkshire' the Fire Service states that Halifax fire station still has two fire engines, one of which is a Combined Aerial Rescue Pump (CARP). Risk and demand has fallen considerably and no longer justify two fire engines and it is now proposed that one of these fire engines is removed leaving the CARP and keeping the fire engine at Illingworth fire station.

5.93 As of October 2012 the proposal to reduce Halifax fire station by 1 engine is open for consultation, however should the proposal be approved then it is likely that the Fire Service will look to construct a smaller fire station nearby to the present site as it is already well under used. An alternative option may be to rent or sell off spare capacity in the existing site.

5.94 Below the strategic level of estates planning, individual developments can require the installation of small scale infrastructure such as new hydrants or water tanks which equally should be classed as essential community infrastructure. The West Yorkshire Fire Service are keen to see responsibility for this handed over to the developer as an integral part of new development. Section 106 agreements should remain a viable means of achieving this aim and West Sussex and Wiltshire Fire Authorities have established legal agreements with local authorities to this effect which could act as guidance for a similar process in Calderdale.

Yorkshire Ambulance Service (YAS)

5.95 The YAS has a 5 year business plan published on their website. The service will continue to operate and plan services around quarterly demand planning and respond to this, along with updates of the 5-year business plan. In terms of physical infrastructure there are currently no proposals in Calderdale

Role / Potential Impact of the Local Plan

West Yorkshire Police Authority

5.96 The priorities for the WYPA are to reduce crime, create safer communities and to increase public confidence and customer satisfaction with their service. Future new developments may impact upon crime rates in either a positive or negative way, therefore the police authority will be kept informed of policy development and anticipated growth areas in the core strategy as it develops.

West Yorkshire Fire and Rescue Authority

5.97 The WYFRA base their planning on projected fire risk areas, each area is rated as set out in the 5-year plan. The service aims to maintain a 7 minute response time to incidents within a very high risk area, to 11 minute response time in a lower risk area. Therefore resources are placed in terms of anticipated impact on these risk areas. The WYFRA need to be mindful of planned major development, residential or non-residential and are therefore keen to be kept informed of the Local Plan progress.

Yorkshire Ambulance Service (YAS)

5.98 The standards that the YAS are required to meet in providing their services are based on demand; for example the service must attend 75% of Category A calls (most serious) within 8 minutes. YAS are also measured on quality of service and patient outcomes. Therefore an increase in population that may arise as a result of significant new development will not necessarily directly impact on the service.

5.99 Changes in demand for ambulances are monitored every quarter and rota changes are planned around this data to ensure that services meet demand – many different factors contribute to demand, not just overall population. For example a leading factor is GP surgeries and how they operate, currently under significant change. Demand for ambulances are affected by policies on GP home visits, out-of-hours calls etc.

5.100 Specifically in terms of the Local Plan however the YAS has expressed an interest in being kept up to date with plans. Although the service will not be interested to comment in consultations as direct impacts on the service from new development are not possible to predict, there will be benefit from understanding potential future growth areas, for example the current investigations into establishing a base in Illingworth Fire Station may be given greater weight if it is known to be a long-term growth area.

6 Green infrastructure

6.1 Green Infrastructure is about natural or semi-natural open spaces which provide habitats for wildlife as well as health and social benefits for those using or living near them.

Responsible Bodies

6.2 The Council is responsible for the network of parks, other green-spaces, allotments and outdoor sports facilities across the borough. On a national level, Natural England has responsibility for ensuring that England's natural environment is protected and improved. Whilst Natural England is independent of the government, the Secretary of State has the legal power to issue guidance to Natural England on various matters.

Strategies, Plans and Programmes

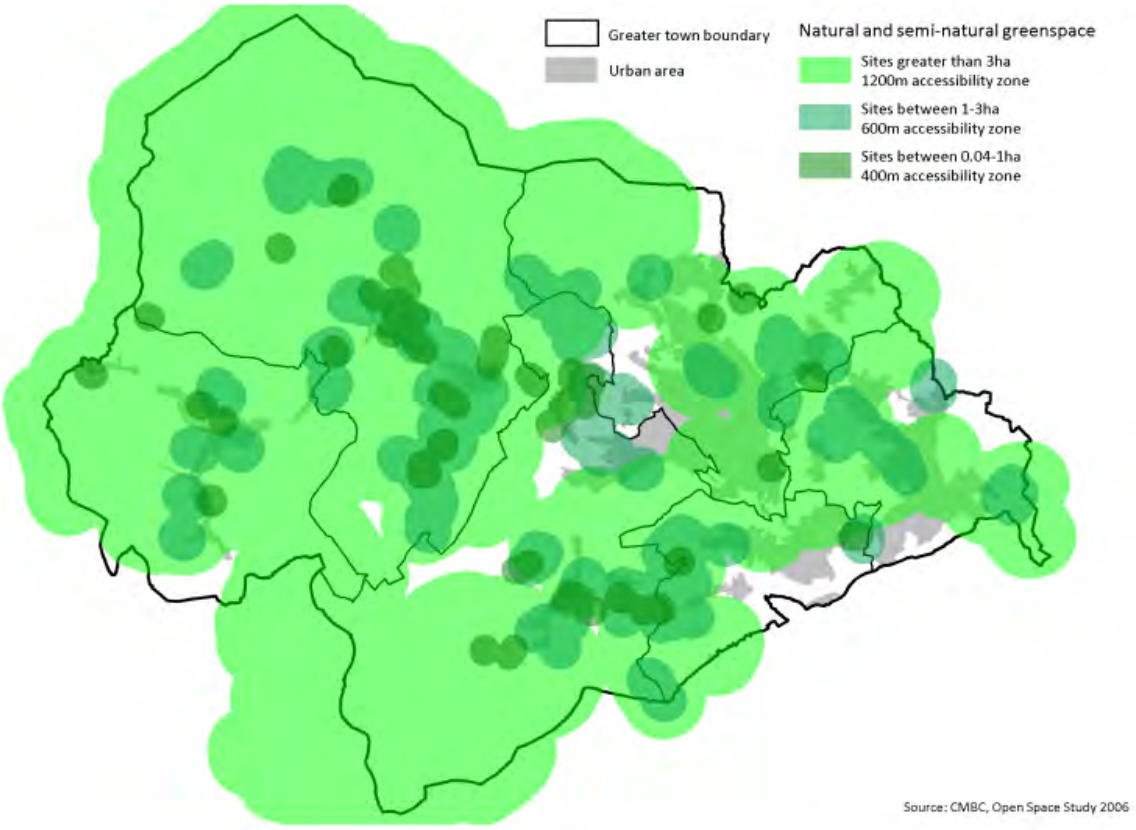
6.3 The Leeds City Region Green Infrastructure Strategy was published in 2010. The strategy is not a statutory planning document, rather it identifies where value can be added to existing and future green infrastructure investment and interventions at the city region scale. Investment programmes and strategic projects contained in the strategy of particular relevance to Calderdale include Urban Green Adaption, Greening our Economic Potential, Carbon Capture, Woodfuel, Rivers for Life and Live Moor/Learn Moor. Further details of each initiative are provided in the Infrastructure Schedule.

6.4 The NPPF recognises that green infrastructure can contribute to conserving and enhancing biodiversity and reducing flood risk and states that plan policies should aim to maintain, and enhance, restore or add to biodiversity conservation interests. The NPPF also states that access to high quality open spaces and opportunities for sport and recreation can make an important contribution to the health and well-being of communities. Planning policies should be based on robust and up-to-date assessments of the needs for open space, sports and recreation facilities and opportunities for new provision. Information gained from the assessments should be used to determine what open space, sports and recreational provision is required.

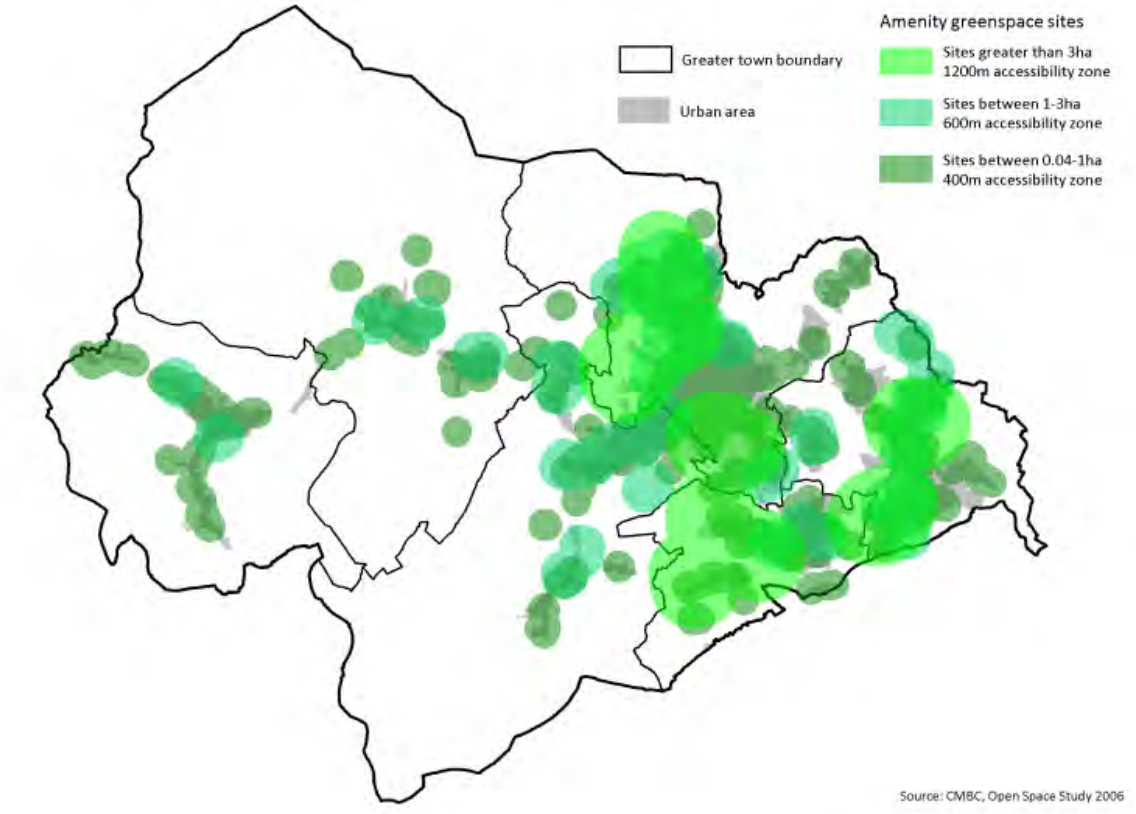
6.5 The latest version of Calderdale's Natural Heritage; A Biodiversity Action Plan for Calderdale was published in 2007 and is regarded as the beginning of a long process to protect and enhance Calderdale's biological diversity. Calderdale's Biodiversity Action Plan is an evolving programme of protection and enhancement of priority habitats. The priority habitats listed in the BAP include ancient trees, blanket bog, canals, hedgerows, unimproved grasslands, ponds and lakes.

6.6 The Strategy and Action Plan (July 2006) for the Calderdale Open Space, Sport and Recreation Study sets out local accessibility standards for all open space typologies. The aspiration for natural and semi-natural green-space is that all settlement areas should be located within 400m of a site sized 0.04ha - 1ha, or 600m within a site between 1-3ha or 1200m within a site of 3ha or greater. The same aspiration applies for amenity green-space. The maps below set out the current provision of natural and semi-natural green-spaces and amenity green-space in the borough.

Map 6.1 Natural and Semi-Natural Greenspace Accessibility



Map 6.2 Amenity Greenspace Accessibility



6.7 The Open Space, Sport and Recreation SPD provides advice to developers regarding the procedures that the Council will follow in implementing policies within the Replacement Calderdale Unitary Development Plan. It contains detailed guidance on open space, sport and recreation provision and expands on the policies in the UDP and is a material consideration in the determination of planning applications. It provides practical and technical guidance to supplement development plan policies aimed at ensuring that new developments, which generate additional demand for recreational open space, contribute towards the provision, improvement and maintenance of open space, recreation and sports facilities capable of serving those developments.

6.8 The Replacement Calderdale UDP provides extensive "saved" policies regarding Green Infrastructure.

Green Infrastructure in Calderdale

Planned Provision

6.9 Calderdale Council do not have sufficient funding to provide new areas of open space and so developers will need to pay planning contributions to fund additional open space needed because of new development. The Council has a limited budget to fund maintenance and upkeep of current open spaces across the district and this has been adversely affected by financial restrictions caused by the austerity cuts made by the coalition government. Concerns have been expressed by the Council's Safer Greener Cleaner Service that such budgetary constraints could lead to lower maintenance standards being applied to existing assets.

6.10 Through the Open Space and Recreation Study and the Open Space, Sport and Recreation SPD, the Council has developed locally devised standards and will require developers to provide open space, indoor and outdoor recreation facilities in accordance with those standards. Recognised areas of deficit include a shortage in the provision of allotments and areas that can be used for community growing areas, woodlands, areas of the Public Rights of Way network that have suffered neglect due to a low maintenance budget and provision of facilities for children and young people to include informal play provision.

6.11 Further deficits are identified in the Calderdale Biodiversity Action Plan to include a number of natural habitats and species. Many of the threats to species and habitats come from development, intensive or inappropriate use of open and green spaces and human impact to include disturbance, litter, dumping, vandalism and erosion of moorland. Listed habitats in need of most conservation include ancient trees, blanket bog, canals, hedgerows, rivers and streams, unimproved grasslands, ponds and lakes. Priority species associated with each habitat have been identified and include bats, birds, amphibians, fish and plants.

6.12 There are many individual studies and management plans for GI assets in Calderdale to include those listed below.

6.13 The emerging Calderdale Tree and Woodland strategy will show how Calderdale is going to manage its woodland resource over the next five years and the aspirations it has to develop and enhance the trees and woodland of the borough. The strategy has been written with the background of budget cuts across services and although the aspirations for good healthy trees and woodland management remain the level of woodland management will be reduced from that originally intended. New funding streams will have to be sought and collaborative ways and opportunities of managing resources identified.

6.14 The Yorkshire Peat Partnership, or YPP, is an organisation formed in 2009 comprising a number of bodies to include the Yorkshire Wildlife Trust, Natural England and the Environment Agency. It also receives support from a number of other organisations to include Pennine Prospects, the National Trust, Yorkshire Water and the Moorland Association. The aim of the partnership is to restore and conserve upland peat resources in order to ensure the long-term future of these unique and valuable

habitats. In turn, this will help increase biodiversity and reduce the amount of CO2 being released into the atmosphere. In Calderdale the project covers the South Pennines north of the river Calder.

6.15 The Twite Recovery Project aims to restore twite nesting and feeding sites and to bring suitable habitat into sympathetic management. It is a dedicated species recovery programme set up by the RSPB and is backed with continuous assessment of the success of the strategies employed and works to incorporate effective habitat restoration measures for twites into public funding. In England the twite is now under threat and has undergone a steeper decline than any other moorland bird. If the British population were lost the world range of the twite would be significantly reduced. This makes the English situation a very serious matter.

6.16 The River Calder Biodiversity Project is a SITA Trust funded project that will physically restore biodiversity habitats at a landscape scale by reinforcing a selection of river corridor sites between Calderdale and Wakefield. This work will be complemented by the Your Heritage project which is Heritage Lottery funded by improving access to selected sites and promoting the wildlife and industrial heritage of the River Calder to the people of the catchment.

Role / Potential Impact of the LDF

6.17 The Core Strategy will require developers to provide or contribute towards open space provision and maintenance. It will also seek to safeguard and enhance biodiversity across the district.

6.18 The Land Allocations DPD will give site specific protection to existing Green Infrastructure. GI work feeding into both the Core Strategy and the Land Allocations DPD will be incorporated into future iterations of the Infrastructure Delivery plan.

7 Delivering infrastructure

7.1 The future of sustainable growth and development within Calderdale depends on the timely funding and delivery of infrastructure that reflects the scale and type of development and the needs in the locality; without it, new development may be delayed and/or there could be unacceptable adverse social, economic or environmental impacts on existing infrastructure.

7.2 Improved alignment of investment is critical to delivery of timely infrastructure. Whilst significant public sector funding will underpin much of the infrastructure delivery to provide the growth set out in the Core Strategy, short public sector funding cycles, can make it difficult to plan for long-term growth. Infrastructure providers have complex financial planning approaches to funding and in the majority of cases bids need to be made many years in advance.

7.3 Commercial and private providers operate to different investment plan cycles, and utilities providers operate to their own five year Asset Management Plans, adding to the difficulty of co-ordinating future investment and infrastructure delivery. Further work still needs to be done with the responsible infrastructure providers to ensure that the necessary infrastructure is provided in a timely fashion. Where appropriate this information will be used to inform and update this IDP.

7.4 It is, therefore, anticipated there will be a degree of uncertainty regarding the latter part of the Core Strategy plan period. However policies and proposals will not be included in the Core Strategy where this IDP cannot demonstrate that there is a contingency arrangement in place should the proposed deliverability mechanism stall.

7.5 As discussed earlier, much of the funding for infrastructure comes from the budgets of public and private organisations responsible for the different infrastructure categories. The planning system however has the power to set charges associated with development for shortfalls in infrastructure funding, or different categories of infrastructure not already funded. In recognition of this the Council are considering the introduction of a local 'development tax' through the Community Infrastructure Levy (CIL). CIL will sit alongside site specific development agreements (often known as Section 106 agreements), the scope of which is being scaled back, to assist in plugging any infrastructure funding gap. The current government has suggested that CIL will remain as the intended primary charging method for obtaining contributions from planning permissions, with some amendments to the Regulations that came into force 6th April 2010.

7.6 It is recognised that in the current economic climate and times of austerity, funding for infrastructure has been reduced. These reductions emphasise the value of a fully co-ordinated approach to planning and delivering infrastructure through the IDP process. The IDP will ensure that charges imposed through an evidenced charging schedule will supplement the cost of certain infrastructure types. It is, however, recognised that developers can only bear a certain level of contribution from planning obligations. Therefore any CIL charging schedule will be subject to a thorough viability assessment to ensure that development is not overly inhibited in the future.

Other sources of revenue

7.7 Due to the fact that developers the Council and its partners are unlikely to be able to bear the full burden of infrastructure costs required across the district it is important other forms of funding are considered. A number of alternative funding and delivery options which the Council can consider for infrastructure projects are briefly described below;

- **Prudential borrowing** - this is financed by Government and has to be sustainable and affordable. The council can undertake unsupported borrowing to fund "invest and save" schemes as long as it is affordable and within its prudential borrowing limit. Prudential borrowing can have an important role to play in meeting capital investment needs, it allows the council to borrow against their asset base and manage investment to fund shortfalls in infrastructure and services.

- **New homes bonus -** introduced by Government in April 2011 to support housing development. This involves government match funding the amount of council tax raised from new homes and vacant properties brought back into use. The New Homes Bonus is an ongoing scheme with match funds paid over 6 years for each new development or vacant property brought back into use. The council is paid the New Homes Bonus if there is an increase in effective stock.
- **Business rate retention -** the Local Government Finance Bill proposes the use of business rate retention. Business rate retention is another incentive local authorities can use to promote economic growth. Rather than increasing the amount businesses pay, it allows local authorities to keep part of their locally collected rates instead of passing revenues back to central government.
- **City Deal** - In July 2012 Government provided devolved budget and decision making powers to 8 city regions. Leeds City Region, of which Calderdale is part, was one city region provided with these new powers. The Leeds City Deal focuses on skills, transport, investment funds, trade and inward investment, supported by a combined authority to achieve efficient and effective decision making. Priorities for infrastructure investment are currently being identified with funding decisions anticipated in 2013.
- **European Funding** - The European Regional Development Fund (ERDF) provides match funding for economic development. JESSICA and JEREMIE schemes involve venture capital and loan schemes.
- **Regional Growth Fund** - The Regional Growth Fund (RGF) runs over 3 years from 2010/11. It has no internal ring fences and the minimum threshold for bids is £1 million. The RGF can be used to invest in infrastructure to enable economic growth, tackle barriers such as congestion and improve connections to job opportunities.
- **Council owned assets -** Capital receipts can be raised through the sale of council assets such as buildings and land. Central Government recently announced a land auctions model in the 2011 Budget. This is a pilot scheme enabling the public sector to auction off publicly owned parcels of land with planning permission. The Localism Act sets out opportunities for communities to manage services and assets previously delivered through the council.

8 Conclusions

8.1 The purpose of this initial IDP report is to present a robust evidence base which identifies what infrastructure is required to support the delivery of the Calderdale Core Strategy, specifically over its first five years. It identifies some of the key infrastructure requirements for the district, key issues relating to provision and in turn what the final IDP for Calderdale will need to focus on. At this stage, this IDP is not complete and will require further detail prior to submission of the Calderdale Core Strategy. It is anticipated that once additional details of growth locations and in some instances individual sites are known the overall implications of the planned growth can be assessed.

8.2 To meet its identified need for development Calderdale will need to accommodate 16,800 new dwellings by around the year 2029, up to 10,000 new jobs and significant new retail space. It is also assumed that the majority of the growth will occur in Halifax and then Brighouse as these are the largest two settlements within the district. This level of growth will require new infrastructure to support these growth aspirations and to assist in the creation of sustainable communities.

8.3 The study indicates there are no 'show stoppers' relating to the delivery of infrastructure required to support this level of growth over the next five years. There are, however, a number of significant challenges which will require resolution within the plan period to ensure that the district can prosper. Some of the potential solutions already benefit from committed funding but given the current times of austerity most remain unfunded. Further work is required to identify the full extent of this 'funding gap' but its identification will assist in setting any relevant level/s or rate/s should the Council wish to pursue a local Community Infrastructure Levy. The IDP would also inform, but not dictate, the list of infrastructure that the Council intends to fund using any CIL charging schedule.

8.4 This IDP will continue to be refined over time. It is anticipated that refinements will be made following periods of consultation upon the Core Strategy and thereafter on an annual basis to allow the full range of infrastructure needs to be kept up to date. Having an up to date IDP will assist not only in the formulation of the Council's development plan but also assist future neighbourhood planning initiatives.

8.5 The biggest infrastructure challenges for Calderdale identified through this initial infrastructure assessment are summarised below;

Physical Infrastructure

8.6 Congestion is currently experienced at peak times and in some instances off peak periods on the M62 motorway, the main local road routes and the trains. It is anticipated that congestion will increase on all forms of transport over the period of the plan.

8.7 There are plans to improve the situation on the M62 through the Managed Motorways scheme, which already benefits from funding. There are also proposals to improve the capacity of junctions however these would require developer contributions.

8.8 The local road network suffers congestion in a number of locations, however the ability to provide 'grand schemes' is limited, even if desirable, by the topography of Calderdale. However, a number of issues which require resolution have been identified including the A629, A58 and A646 corridors and the town centres of Brighouse, Hebden Bridge and Sowerby Bridge. These blockages are creating access issues for residents and businesses alike, particularly in areas such as the Upper Calder Valley and North Halifax. The 9 'Infrastructure delivery schedule' does include some funded works for minor solutions to some of these issues but much wider solutions, as yet unfunded, are required. These blockages also have 'knock-on' effects on the bus network further reducing accessibility. Whilst West Yorkshire Metro are looking at new and improved ways of providing bus services local interventions such as junction priority schemes require investigation.

8.9 In terms of rail the Calder Valley line is an undoubted asset but its speed, reliability, destinations and quality require attention. In addition station improvements and potential new stations would assist in improving access to jobs and services and assist in reducing congestion from the road network. The improvement of the Calder Valley Line is a priority for the Council and work will continue with partners to progress improvements to the line. In terms of funding schemes on the line a large 'funding gap' exists between funded works and long-term requirements. However, existing committed schemes such as the Todmorden Curve will provide significant improvements such as greater access to more destinations.

8.10 The walking and cycling network is slowly expanding within the district with new funds for additional routes already approved. But much is still required to be done as this will not only assist the congestion on our roads but also issues concerning health.

8.11 The utility companies have not at this stage identified any significant issues regarding future supply, although it is recognised that some rural areas, particularly in the Upper Calder Valley, are not currently connected to the full range of utilities. The utility companies note that there may be some need for reinforcement of the network but this will depend on the type, scale and location of individual developments.

8.12 Whilst there are no utility issues which will stop development there is a need to improve broadband within the district to ensure our businesses remain competitive. The Council are currently working with partners to bid for funding for undertaking improvements to the district's broadband infrastructure.

8.13 The Council is working in partnership with Bradford MDC on waste management facilities. A new municipal waste facility in Bradford will provide services to both districts from 2016. Whilst this new facility will deal with much of the municipal waste there will still be a need to deal with some municipal and commercial waste within the district during the plan period which, dependent upon their scale, is likely to include two or more new facilities.

8.14 In terms of flood risk the Core Strategy will endeavour to minimise the risk of flooding to new and existing development wherever possible by steering development away from areas of high flood risk. There are still areas which are prone to flood risk and the Environment Agency has identified a number of potential schemes to assist protection of property. In addition flood alleviation works are currently being undertaken within Todmorden.

Social Infrastructure

8.15 Schools form a vital part of the local infrastructure of an area. The provision of sufficient school places for the local population, and maintenance of school facilities to a suitable condition, are both crucial factors to consider in the long term planning of infrastructure. Issues of an increasing population and budgetary restrictions mean that funding for new and improved school facilities are likely to become more critical in the future. The growth locations contained within the Preferred Options will need to be carefully planned with regards improvements and new school provision and mechanisms will need to be put in place to ensure any funding gap is filled.

8.16 Likewise health facilities in terms of GP surgeries, dental practices, clinics and hospitals are essential elements of infrastructure provision. To accommodate these needs it is important the Local Plan co-ordinates future development as closely as possible in order to match services with need. The NHS is currently in a period of re-organisation and it is therefore difficult to identify future requirements at this point in time.

8.17 For community facilities the current provision is generally sufficient across the district, although in some instances it is difficult to accurately assess this due to a lack of relevant standards. In future years given reduced budgets it is likely that some services may be affected particularly libraries and post offices. In addition whilst the district has sufficient cemetery provision for the next 35 to 40 years there are no municipal facilities in the Upper Calder Valley.

8.18 The emergency services within Calderdale consist of West Yorkshire Police Authority, the West Yorkshire Fire and Rescue Authority and the Yorkshire Ambulance Service. In general no specific infrastructure needs have been raised with the exception of West Yorkshire Fire and Rescue Authority who are currently consulting on the closure of 2 facilities in Calderdale (Brighouse and Elland fire stations) and the building of a new fire station in Rastrick. In addition below the strategic level individual developments can require the installation of small scale infrastructure such as new hydrants or water tanks which equally should be classed as essential community infrastructure. The West Yorkshire Fire Service are keen to see responsibility for this handed over to the developer as an integral part of new development. This will need consideration in terms of funding mechanisms for such infrastructure.

Green Infrastructure

8.19 Calderdale Council do not have sufficient funding to provide new areas of open space and so developers will need to contribute to fund additional open space needed because of new development. The Council has a limited budget to fund maintenance and upkeep of current open spaces across the district and this has been adversely affected by financial restrictions caused by the austerity cuts made by the coalition government. Concerns have been expressed by the Council's Safer Greener Cleaner Service that such budgetary constraints could lead to lower maintenance standards being applied to existing assets.

8.20 Further deficits are identified in the Calderdale BAP to include a number of natural habitats and species. Many of the threats to species and habitats come from development, intensive or inappropriate use of open and green spaces and human impact to include disturbance, litter, dumping, vandalism and erosion of moorland. A number of schemes have been identified to overcome these deficits but as with other forms of infrastructure most are currently unfunded.

9 Infrastructure delivery schedule

9.1 The infrastructure delivery schedule provides a brief summary of known investment schemes from a variety of organisations. The different schemes are provided in a tabular form and include information on funding, delivery,management responsibilities and time scales. This schedule will be republished and updated regularly to maintain an up to date record on the individual progress of schemes, funding positions and changing dependencies.

9.2 The following schedule has three main categories for the stage of commitment reached for each project these are;

Scheme identified and funded
Scheme agreed but funding yet to be identified
Scheme identified but not yet committed and funding still to be identified

Physical infrastrucure

Transport

Table 9.1 Strategic Road Network

Area	Works	Funding	Cost (£)	Lead	Partners	Comment	Time frame
M62 motorway between junction 25 and 30	Managed Motorway scheme	DfT	Unknown	Highways Agency		The scheme will use variable speed limits and controlled use of the hard shoulder to increase traffic capacity and relieve existing delays.	Due for completion 2013
M62 Junction 24 Ainley Top	Junction capacity	DfT, Developer contributions	Unknown	Highways Agency	CMBC, KMC, Developers	Signalise roundabout and circulatory widening. To deal with issues of queues on M62 off-slip road due to	Pre 2018

Area	Works	Funding	Cost (£)	Lead	Partners	Comment	Time frame
						additional development pressures.	
M62 Junction 26 Chain Bar	Junction capacity	Dft, Developer contribution from 4 West Yorkshire LAs	Unknown	Highways Agency	CMBC, KMC, Leeds CC, Bradford MBC, Developers	Improve capacity on roundabout. To ease congestion by changing lane designations and widening.	2013/14
M62 Junction 25 Brighouse	Junction capacity	DfT, Developer contribution from CMBC, KMC	Unknown	Highways Agency	CMBC, KMC, Developers	Signalisation roundabout. To maximise capacity on roundabout and manage queue length on motorway slip road.	Unknown but unlikely to start before 2018
M62 Junction 24 Ainley Top	Junction capacity	DfT, Developer contributions	Unknown	Highways Agency	CMBC, KMC, Developers	Re-design roundabout to form a 'hamburger' style layout. To deal with issues of queues on M62 off-slip road due to additional development pressures. No firm commitment.	Post 2018
M62 Junction 25 Brighouse	Traffic management	Developer contribution from CMBC	Unknown	Highways Agency	CMBC, Developers	Manage traffic in Brighouse town centre. Stop queue from junctions in Brighouse extending back to	Unknown but unlikely to start before 2018

Area	Works	Funding	Cost (£)	Lead	Partners	Comment	Time frame
						motorway. No firm commitment.	
M62 Junction 26 - 27	Capacity	Developer contribution from 4 West Yorkshire LAs	Unknown	Highways Agency	DfT, CMBC, KMC, Leeds CC, Bradford MBC, Developers	Widening and free flow M62 westbound to M606 merge point. T	Unknown but unlikely to start before 2018
M62 Junction 24a	Improve capacity and connectivity	WYTF, Developer contributions	19m	Highways Agency	CMBC, KMC, LCR	New junction on the A641 to improve connectivity to Huddersfield and Brighouse west bound diverge only and improve capacity on the network by freeing up other junctions	Unknown but unlikely to start before 2018

Table 9.2 Local Road Network

Area	Works	Funding	Cost (£)	Lead	Partners	Comment	Time frame
District wide	Re-surfacing, road safety etc.	LTP3, CMBC	On-going	CMBC		Maintenance and improvement works	On going
Copley	New distribution road and bridges	Developer	Unknown	Developer	CMBC, Yorkshire Forward	New distribution road including new bridges between Wakefield Rd/ Fall Lane for Copley Valley development	Started 2011
A629	Junction	LTP3	85,000	CMBC	Metro	Improve pedestrian/ traffic flows	Works likely to

Area	Works	Funding	Cost (£)	Lead	Partners	Comment	Time frame
							start 2011/12
A646 M'royd	Highway and junction	LTP3	215,000	CMBC	Metro	Better pedestrian/ public transport facilities etc.	Works likely to start 2011/12
Elland town centre	Town centre	LTP3, WYLSTF, Developer	205,000	CMBC	Metro, Developers	Improvements to town centre traffic management including pedestrian improvements	Works likely to start 2012/13
King Cross	Pedestrian Bus stop	WYLSTF	200,000	CMBC		Pedestrian and bus stop improvements to provide better access to west central Halifax employment areas and college.	Unknown but likely to start before 2017
Bull Green Gateway	Pedestrian Links	WYLSTF, LTP3	160,000	CMBC		Improved pedestrian links to town centre, public transport and employment	Unknown but likely to start before 2017
A629 Corridor & Halifax town centre	Multi-modal improvements between Huddersfield and Halifax	WYTF	120m	CMBC, KMC, LCR	Metro, Developers	Package of junction improvements including Ainley Top and Calder and Hebble, Halifax eastern relief road, Halifax town centre access improvements and public transport priorities.	Unknown
A641 Corridor	Bradford to Huddersfield	WYTF	76m	CMBC, KMC,	Metro, Developers	Package of junction	Unknown

Area	Works	Funding	Cost (£)	Lead	Partners	Comment	Time frame
	multi-modal improvments			Bradford, LCR		improvements, Brighouse eastern relief road and access to junction 25, town centre access improvments and public transport priorities.	
A58 Corridor	Junction and public transport improvements	WYTF	9m	CMBC, LCR	Metro, Developers	Junction improvements at Hipperholme, Beacon Hill and Stump Cross. Public transport improvements.	Unknown
A644 Corridor	Dewsbury to Brighouse multi-modal improvements	WYTF	53m	CMBC, KMC, LCR	Metro, Developers	Package of improvements between Dewsbury and Brighouse	Unknown
Brighouse town centre	Sainsbury turning	Unknown	Unknown	CMBC	Sainsburys	Provide solution to existing turning to Sainsburys' to alleviate congestion in town centre. Funding unknown	Unknown

Table 9.3 Public Transport - General

Area	Works	Funding	Cost (£)	Lead	Partners	Comment	Time frame
West Yorkshire wide	Integrated ticketing	LTP3	1.1m	Metro		Introduce integrated ticketing and smart cards across West Yorkshire	Commence 2012
West Yorkshire wide	Transport Hubs	LTP3	3.7m	Metro	Local authorities	Scheme to identify existing and new transport hubs and inclusion of facilities	Commence 2012

Area	Works	Funding	Cost (£)	Lead	Partners	Comment	Time frame
						across West Yorkshire. Concepts and locations defining begun 11/12	

Table 9.4 Public Transport - Rail

Area	Works	Funding	Cost (£)	Lead	Partners	Comment	Time frame
West Yorkshire wide	Information screens	LTP3	919,000	Metro	Network Rail, Northern Trains, Local authorities	5 customer information screens throughout Calderdale rail stations.	Commence 2011/12
Sowerby Bridge & Todmorden	Rail station parking	Station Commercial Project Facility Funding	?	Metro	Rail network, Local Authorities	Provide 49 additional spaces at Sowerby Bridge and 21 at Todmorden	Commence 2012
Todmorden	Railway Curve	Regional Growth Fund	9m (includes 1 year running costs)	Network Rail	CMBC and other LAs	Replace short length of curved track in Todmorden to improve access to Burnley, East Lancashire and Manchester via Todmorden. Scheme identified in Initial Industry Plan and support identified through National Infrastructure Plan 2011.	2014 onwards
Sub regional	Electrification of Calder Valley Line	Unknown (possibly DfT)	Unknown	Network Rail	CMBC and other LAs	Electrify whole line to improve speed and capacity on the line. No funding	Unknown

Area	Works	Funding	Cost (£)	Lead	Partners	Comment	Time frame
						committed at this stage.	
Sub regional	Additional services and capacity	Unknown	Unknown	Network Rail, Northern Trains		Direct access to Manchester Airport form Calder Valley Line, train lengthening, additional train each hour between Leeds and Manchester via Calder Valley Line. Identified in Initial Industry Plan but no firm funding commitment at this stage.	2014 onwards
Elland	Train Station	Unknown	Unknown	Network Rail, Metro, CMBC		Ambition to provide a new station at Elland, currently in the early GRIP stages. No firm commitment at this stage.	Unknown
Hipperholme	Train Station	Unknown	Unknown	Network Rail, Metro, CMBC		Ambition to provide a new station at Hipperholme, currently in the early GRIP stages. No firm commitment at this stage.	Unknown
Halifax Station	3rd Platform	Unknown	Circa 10million	Network Rail, Metro, CMBC, Eureka!		Ambition for a new platform at Halifax. Identified in Initial Industry Plan but no firm funding	2014 onwards

Area	Works	Funding	Cost (£)	Lead	Partners	Comment	Time frame
						commitment at this stage.	
Sowerby Bridge, Todmorden	Station	Unknown	Unknown	Network Rail, Metro, CMBC		Improvements to both stations possibility of making Sowerby Bridge Station into an eco-station.	Unknown

Table 9.5 Public Transport - Bus

Area	Works	Funding	Cost (£)	Lead	Partners	Comment	Time frame
West Yorkshire wide	Quality Bus Contracts	LTP3	300,000	Metro, Bus operators		Develop quality bus contracts to provide more accountability and better services	Start 2011/12
A629 Halifax Huddersfield	Bus priority corridor	LTP3	250,000	Metro, Bus operators	CMBC, KMC	Provide bus priority as well as enhanced public transport facilities	Start 2011/12
Brighouse TC	Bus access	LTP3	50,000	Metro, Bus operators	CMBC	Town centre improvements to bus and general traffic flows	Start 2011/12
King Cross	Bus access	LTP3	330,000	Metro, CMBC	Bus operators	Package of works to improve access and bus service reliability	Start 2011/12

Table 9.6 Walking and cycling

Area	Works	Funding	Cost (£)	Lead	Partners	Comment	Time frame
Hebble trail	Cycle route	WYLSTF, LTP3	280,000	CMBC, Metro		Extension of the Hebble Trail north to Holmfield and into the town centre	Commence 2011/12
Halifax Town Centre	Improved pedestrian routes	WYLSTF	500,000	CMBC		Provide pedestrian links across town centre and to employment areas on the periphery.	Unknown

Area	Works	Funding	Cost (£)	Lead	Partners	Comment	Time frame
Ripponden	Cycle route	Unknown	Unknown	CMBC		Provide cycle route along old railway line	Unknown

Utilities

Table 9.7 Utilities

Area	Works	Funding	Cost (£)	Lead	Partners	Comment	Time frame
Calderdale wide	Waste Water Treatment Works	Yorkshire Water	Unknown	Yorkshire Water	CMBC	Possible need for capacity increases due to development	Unknown
Calderdale Wide	Re-inforcement of electricity network	YEDL	Unknown	YEDL	**CMBC**	Some reinforcement may be necessary in plan period but locations not known	Unknown
Calderdale Wide	Re-inforcement of Gas network	NGNs	Unknown	NGNs	**CMBC**	Some reinforcement may be necessary in plan period but locations not known	Unknown
Calderdale Wide	Roll-out of new network fibres for telecoms/ broadband	Yorkshire and Humber European regional development Fund	Unknown	BT, Virgin & Others as new players emerge	**CMBC**	District wide coverage of fast broadband required for educational and business benefits it brings. Technology moving rapidly but investment in fibre being pursued.	Unknown

Waste Management

Table 9.8 Waste Management

Area	Works	Funding	Cost (£)	Lead	Partners	Comment	Time frame
Halifax	Additional Waste Transfer Station	CMBC & SITA	Unknown	CMBC & SITA		To provide an additional waste transfer facility	Start 2011
Calderdale Wide	Improvements to Household Waste Recycling Sites (HWRS)	CMBC	Unknown	CMBC & SITA		Programme of improvements to improve HWRS throughout Calderdale. So far work has been completed at Elland, Brighouse, and Halifax	Next 5 years - TBC

Flooding, drainage and water quality

Table 9.9 Flooding, drainage and water quality

Area	Works	Funding	Cost (£)	Lead	Partners	Comment	Time frame
River Calder/ Walsden Water, Todmorden	Todmorden Flood Alleviation Scheme Phase 3	Environment Agency	13m	Environment Agency	CMBC, Developers	This phase looks at reducing the risk of flooding from Walsden Water	Start 2011

Social infrastructure

Education

Table 9.10 Education

Area	Works	Funding	Cost (£)	Lead	Partners	Comment	Time frame
Halifax	3 X new Primary schools 1 X new Secondary school incorporating 6th Form provision	TBC	£48 - £56 million plus site acquisition costs.	CMBC		Primary schools build cost approximately £6 - £7 million each excluding site acquisition. Secondary (plus 6th form) £30 - £35 million.	TBC

Area	Works	Funding	Cost (£)	Lead	Partners	Comment	Time frame
Brighouse	2 X new Primary schools 1 X new Secondary school incorporating 6th Form provision	TBC	£37 - £44 million plus site acquisition costs.	CMBC		Primary schools build cost approximately £6 - £7 million each excluding site acquisition. Secondary (plus 6th form) £25 - £30 million.	TBC
Elland	1 X new Primary school 1 X Secondary school expansion for 1.5 forms of entry	TBC	£11 - £17 million plus site acquisition cost.	CMBC		Primary school build cost approximately £6 - £7 million excluding site acquisition. Estimate of £5 - £6 million for secondary school expansion.	TBC
Todmorden	1 X new Primary school Secondary school rebuild to accommodate expansion of 1 form entry	TBC	£36 - £42 million plus site acquisition cost.	CMBC		Primary school build cost approximately £6 - £7 million excluding site acquisition. Secondary expansion would necessitate complete rebuild of existing Todmorden High due to very poor state of buildings - £30 - £35 million.	TBC
Sowerby Bridge	1 X new Primary school 1 X rebuild Secondary school to accommodate expansion for 1.5 forms of entry	TBC	£11 - £17 million plus site acquisition cost.	CMBC		Primary school build cost approximately £6 - £7 million excluding site acquisition. Estimate of £5 - £6 million for secondary	TBC

Area	Works	Funding	Cost (£)	Lead	Partners	Comment	Time frame
						school expansion.	
Hebden Bridge, Mytholmroyd & Luddendenfoot	1 X Primary school expansion for 1 form entry (0.5 Hebden Bridge, 0.5 Mytholmroyd/ Luddendenfoot) 1 X rebuild Secondary school to accommodate expansion for 1.5 forms of entry	TBC	£36 - £42 million plus site acquisition cost.	CMBC		Shared solution possible to meet Hebden Bridge, Mytholmroyd & Luddendenfoot requirements. Primary school expansion/build cost approximately £6 - £7 million excluding site acquisition. Secondary expansion would necessitate complete rebuild of existing Calder High due to very poor state of buildings - £30 - £35 million.	TBC
Northowram & Shelf	1 X Primary school expansion for 0.5 forms of entry 1 X Secondary school expansion for 1 form of entry	TBC	£2.5 - £3.5 million	CMBC		Primary expansion of 0.5 form entry estimated at £1 - £2 million. Secondary and 6th Form calculated as contribution based at £18,469 per pupil - around £1.5 million.	

Health

Table 9.11 Health Facilities

Area	Works	Funding	Cost (£)	Lead	Partners	Comment	Time frame
Halifax	Relocation of Laura Mitchell Health Centre	Calderdale NHS	Unknown	Calderdale NHS		New facility to house the Laura Mitchell Health Centre	2012

Community and Culture

Table 9.12 Museums

Area	Works	Funding	Cost (£)	Lead	Partners	Comment	Time frame
Bankfield (Halifax)	Bankfield Museum major repair works	TBC	Unknown	CMBC		Major works required such as re-roof and electrical upgrade. Committment to undertaking work however no work programme currently scheduled	TBC

Table 9.13 Libraries

Area	Works	Funding	Cost (£)	Lead	Partners	Comment	Time frame
Halifax	Potential relocation/ refurbishment of Halifax Central Library	TBC	Unknown	CMBC		Possible new facility or refurbishment of existing to house Halifax Central Library	TBC

Emergency Services

Table 9.14 Emergency Services

Area	Works	Funding	Cost (£)	Lead	Partners	Comment	Time frame
North Halifax (Illingworth)	Yorkshire Ambulance Service satellite facility (Fire Station partnership)	Yorkshire Ambulance Service	Unknown	Yorkshire Ambulance Service	West Yorkshire Fire Service	Provide additional base (as per King Cross facility) beyond the 3 main ambulance	Unknown

Area	Works	Funding	Cost (£)	Lead	Partners	Comment	Time frame
						stations in the district to run local services and serve the North Halifax area – currently being investigated	
Rastrick	New fire station	West Yorkshire Fire Service	Unknown	West Yorkshire Fire Service		New facility to replace Brighouse and Elland fire stations. Final decision to be made on 16th Dec 2011.	Next 5 years

Green infrastructure

Table 9.15 Green Infrastructure

Area	Works	Funding	Cost (£)	Lead	Partners	Comment	Time frame
South Pennine Moors	Moors for the Future (MoorLIFE)	Heritage Lottery Fund, European Union LIFE+	Unknown	Moors for the Future Partners	National Trust, RSPB, Natural England, Yorkshire Water, Envi Agency, United Utilities, CMBC	Raise awareness of the value of the moors, to restore and conserve moorland and develop expertise on how to maintain and manage the moors sustainably.	Moors for the future started 2003 MoorLIFE started 2010
South Pennines	Watershed Landscape project			Pennine Prospects			
District wide	Woodfuel	Unknown	Unknown	Forestry C'mission	LCR, CMBC, White Rose Forest,	The Woodfuel Investment Programme	Start 2010

Area	Works	Funding	Cost (£)	Lead	Partners	Comment	Time frame
					Yorwoods, Yorkshire Forest Partnerships	will encourage the sustainable management of new and future woodland assets to increase the amount of woodfuel available	
District wide	Greening Our Economic Potential	Unknown	Unknown	Leeds City Region	CMBC, Metro, Natural England, Highways Agency, Network Rail	This programme focuses on planning for green infrastructure to support the remediation and development of brownfield sites and promotion of strategic employment sites. The programme will encourage green infrastructure that promotes green journeys to work	Start 2014
District Wide	Carbon Capture	Unknown	Unknown	Forestry C'mission (Woodland) Pennine Prospects (Peatland)	LCR, CMBC, Yorkshire Peat Partnership, Local Academic Institutions	This programme will seek to ensure provision is made in new developments for retaining or creating carbon sinks. The programme will build on existing	Start 2011

Area	Works	Funding	Cost (£)	Lead	Partners	Comment	Time frame
						initiatives such as the West Yorkshire Working Woodlands Project and the Woodfuel Programme	
Halifax, Sowerby Bridge and Brighouse	Urban Green Adaption	Unknown	Unknown	Leeds City Region	CMBC, Natural England, Environment Agency	This programme seeks to secure investment for a wide range of green infrastructure actions to include tree planting and promotion of innovation in green technologies	Start 2014
River Corridors	Rivers For Life/Fresh Aire	Unknown	Unknown	Forestry C'mission and LCR	CMBC, Envi Agency, Natural England, White Rose Forest Partnership, British Waterways	This programme will establish a coordinated approach to river catchment management the main focus of which will be the restoration of river channels to reduce flood risk and provide multifunctional GI benefits	Start 2014
South Pennine Moors	Live Moor/Learn Moor	Unknown	Unknown	Pennine Prospects and Yorkshire Peat Partnership	CMBC, Envi Agency, English Heritage, Natural England,	The project will extend the scope of the South Pennine Moors Project by directing green	2013 onwards

Area	Works	Funding	Cost (£)	Lead	Partners	Comment	Time frame
					Yorkshire Wildlife Trust	infrastructure investment into a new large scale landscape restoration scheme that offer multiple GI benefits	