



Kirklees Local Plan

Infrastructure Delivery Plan Addendum

November 2016

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1 Introduction

- 1.1 Kirklees Council is producing a Local Plan, and to support the plan the role of infrastructure provision has been considered throughout the process. In November 2015 the council published the Infrastructure Delivery Plan (IDP) in support of the draft Local Plan. The IDP provides a comprehensive assessment of infrastructure in support of the Local Plan. The council also produced an Infrastructure Technical Paper to build on the evidence in the IDP which was also made available during the draft Local Plan consultation between 9th November 2015 and 1st February 2016.
- 1.2 This document; the Infrastructure Delivery Plan Addendum, identifies updates which have arisen from the on-going infrastructure planning that has occurred since the Local Plan consultation. The report focuses on the three infrastructure areas of Health, Education and Transportation.
- 1.3 The Health section provides a summary of discussions that have been held between the planners producing the Local Plan and health care professionals planning for health infrastructure across Kirklees.
- 1.4 The Education section incorporates an update of the information that was previously published in the Infrastructure Technical Paper (November 2015).
- 1.5 The Transportation section provides a comprehensive update of the IDP Transport chapter, (October 2015) with accompanying schemes updated in the Infrastructure Delivery Programme (Appendix E).
- 1.6 The IDP (October 2015) and IDP Addendum (November 2016) provide infrastructure planning evidence to support the Local Plan in line with the requirements of the National Planning Policy Framework (NPPF). The revised Infrastructure Technical Paper provides an explanation of the infrastructure planning process for the Local Plan and which policies in the plan will help deliver infrastructure through the planning process.
- 1.7 The IDP and IDP Addendum also provide the evidence required to establish the infrastructure funding gap evidence for the Community Infrastructure Levy (CIL) process. Further evidence about the CIL process can be found on the council's website at:

<https://www.kirklees.gov.uk/beta/planning-policy/community-infrastructure-levy.aspx>

2 Health Infrastructure

- 2.1 Health services in Kirklees are delivered by a number of different organisations. Primary health care (e.g. GPs) is planned for by the North Kirklees Clinical Commissioning Group (CCG) and the Greater Huddersfield CCG. Secondary health care (e.g. hospitals) are managed by a number of Trusts, including Calderdale and Huddersfield NHS Foundation Trust and The Mid Yorkshire Hospitals NHS Trust. Other areas of NHS infrastructure are managed by NHS England, and NHS Property Services (Prop Co). This reflects some of the complexity with the structures of the NHS in managing their infrastructure and future planning. This is covered in more detail in the Infrastructure Delivery Plan.
- 2.2 Health issues have also been factored into the site assessment process for the Local Plan through a Comprehensive Health and Wellbeing Impact Assessment for Planning Tool. Further detail about this process can be found in the draft Local Plan Methodology.
- 2.3 Meetings have taken place with North Kirklees and Greater Huddersfield CCGs and NHS Property Services (Pro Co) to plan for the impacts of the allocations in the draft Local Plan and how it can influence NHS forward planning and investment including GP estates strategies and hospital infrastructure needs. The outcome of this cooperation is an important element of the duty to cooperate with health infrastructure providers as part of the Local Plan process and ensures that a mechanism is in place to deliver the health infrastructure required to support the growth that the Local Plan promotes.
- 2.4 The draft Local Plan is being considered as part of the forward plans for both Huddersfield and North Kirklees CCGs, including their 5 year strategies.

Large Strategic Housing Sites

- 2.5 The draft Local Plan includes three sites that each plan for over 1000 dwellings and they have been considered in more detail due to their likely impact on local health infrastructure:

(H2089) Land to the south of Ravensthorpe/Lees Hall Road, Dewsbury

- 2.6 This site plans for approximately 2500 homes within the local plan period which is up to the year 2031, with a further 1500 homes to come after the plan period, resulting in a total of 4000 homes within the site boundary. Due to the scale of this proposal it is highly likely that a health and well-being facility will be required on site as part of a development masterplan.

(H1747) Land north of Bradley Road, Bradley, Huddersfield also considering growth from adjacent site: (H351) Land north of Bradley Road, Bradley, Huddersfield

- 2.7 This area includes two adjacent accepted housing options which result in approximately 2000 homes within the local plan period up to 2031, with a further 300 homes to come after the plan period, resulting in a total of 2300 homes in the immediate area. Due to the scale of this proposal it is highly likely that a health and well-being facility will be required on site as part of a development masterplan.

(MX1905) Land east of 932-1110 Leeds Road, Shaw Cross/Woodkirk

- 2.8 This is a mixed use site which includes 122,500 square metres of employment land and approximately 1500 homes. Due to the scale of this proposal it is highly likely that a health and well-being facility will be required on site as part of a development masterplan.

Limitations

- 2.9 The planning of NHS services is complex, with different Clinical Commissioning Groups planning GP provision and different NHS Hospital Trusts providing different hospital services. NHS England also has other responsibilities and NHS Property Company manage some of the property assets along with hospital trusts and individual GPs. Further detail about the planning of NHS services can be found in the Kirklees Local Plan Infrastructure Delivery Plan.

Conclusions

- 2.10 An assessment of current health infrastructure has been undertaken as part of the Kirklees Local Plan Infrastructure Delivery Plan, and discussions are on-going between the Planning Policy Team and NHS representatives to ensure that health infrastructure is in place to meet future needs. The significant scale of housing proposed at the sites south of Ravensthorpe/Lees Hall Road, Dewsbury, north of Bradley Road, Bradley and east of 932-1110 Leeds Road, Shaw Cross/Woodkirk, Dewsbury will result in a level of need that will require a health and well-being facility to be incorporated into the masterplans for these sites. The specific nature of which will be established through on-going discussions between the council, site promoters and NHS representatives.

3 Education Infrastructure

- 3.1 There are a number of on-going assessments and discussions which have fed into the planning process for education infrastructure to support the draft Local Plan. As part of the site assessment process, each housing and mixed use option has been considered against the existing primary and secondary school needs and emerging trends. The district wide assessment of current schools infrastructure, future investment and needs is summarised in the Infrastructure Delivery Plan and considered in more detail in the council's 'Securing Sufficient School Places Document (2015)'. Updated information has been included to reflect the latest school census data in relation to inter planning area movement, cross LA border movement, and, where applicable changes to the number of available places in 2015/16, for example where new school provision has been introduced.
- 3.2 Building on these pieces of evidence, work is on-going to understand the impacts of the future growth brought by the local plan upon the provision of early learning and childcare, primary and secondary school infrastructure. Meetings have taken place between planning officers and those in the School Organisation and Planning department of the Learning and Skills Service, and their counterparts in bordering authorities including Leeds, Wakefield, Bradford and Calderdale. This is important to build a picture of emerging cross border impacts on schools and early learning and childcare place provision within Kirklees and in bordering authorities as a result of the growth proposed in the draft Local Plan, also considering the emerging plans in these bordering authorities. This process is an important element of meeting the legal Duty to Cooperate, which applies to the process of creating local plans.

School Place Planning

- 3.3 The on-going discussions between Kirklees School Organisation and Planning Team and Planning Policy Team have resulted in the sharing information which is informing the forward planning for future school infrastructure.
- 3.4 As the School Organisation and Planning Team have updated their assessment of existing needs in the Securing Sufficient School Places Document (2015), the accepted housing sites in the draft Local Plan have been considered. Further to this, the information about when the houses on each development site will be built in the draft Local Plan phasing table has been assessed. The phased housing growth has been considered against primary and secondary place planning area boundaries to understand the potential impact in each.
- 3.5 This has provided the opportunity to add a further layer of analysis on top of the detailed considerations in the Securing Sufficient School Places document, looking at the phased impact of future growth in 5 year time periods. This provides the starting evidence to explore the correct type of intervention required in each area to meet the needs of future growth, and ensure that the correct infrastructure is in place at the correct time. The methodology and results of this analysis can be found in Appendix A.

Large Strategic Housing Sites

- 3.6 The draft Local Plan includes three sites that each plan for over 1000 dwellings and they have been considered in more detail due to their likely impact on local school infrastructure:

(H2089) Land to the south of Ravensthorpe/Lees Hall Road, Dewsbury

- 3.7 This site plans for approximately 2500 homes within the local plan period which is up to the year 2031, with a further 1500 homes to come after the plan period, resulting in a total of 4000 homes within the site boundary.
- 3.8 The site falls within the Dewsbury South and Mirfield Primary Planning Areas. The Securing Sufficient School Places Document (2015) for Dewsbury South Primary Planning Area states;

*In the context of the potential impact of proposed strategic site development in the **Local Plan**, it is anticipated that there will be a requirement for additional primary places in future years through additional infrastructure. A more strategic approach to sufficiency planning may be required across a wider geographical area and should take into account existing capacity in existing schools.*

- 3.9 The site falls within the secondary planning Areas of Dewsbury and Cleckheaton, Heckmondwike, Liversedge & Mirfield. The Securing Sufficient School Places Document (2015) states;

*In the context of the potential impact of two proposed strategic site developments, one in Dewsbury East and Dewsbury South in the **Local Plan**, it is anticipated that there would be a requirement for additional secondary places over and above those already provided. A more strategic approach to sufficiency planning will be required across a wider geographical area, including in Batley, Birstall, Birkenshaw and Gomersal, and in Cleckheaton, Heckmondwike, Liversedge and Mirfield.*

- 3.10 The current assessment demonstrates that based on existing capacity and trends, and the scale of development proposed, this site will require at least a two form entry¹ primary school building to be developed on site, with the potential of a four form entry school, subject to further analysis alongside future pupil demographic information.

(H1747) Land north of Bradley Road, Bradley, Huddersfield also considering growth from adjacent site: (H351) Land north of Bradley Road, Bradley, Huddersfield

- 3.11 This area includes two adjacent accepted housing options which result in approximately 2000 homes within the local plan period up to 2031, with a further 300 homes to come after the plan period, resulting in a total of 2300 homes in the immediate area. The site falls within Huddersfield North Primary Planning Area. Assessment within the Securing Sufficient School Places Document (2015) states that;

¹ 1 class of entry assumes 30 pupil places per yeargroup

*In the context of the potential impact of a proposed strategic site development in the **Local Plan**, it is anticipated that there will be a requirement for further additional primary places over and above those already required. There is an indication that land provision could be made available on the site for additional school infrastructure.*

- 3.12 The site falls within Secondary Planning Area of Huddersfield North & West. Assessment within the Securing Sufficient School Places Document (2015) identifies that;

*In the context of the potential impact of proposed strategic site development in the **Local Plan**, it is anticipated that there will be a requirement for additional secondary places. However, a more strategic approach to sufficiency planning will be required across a wider geographical area, including Holme Valley, Honley and Meltham, Huddersfield South West and East and Colne Valley.*

- 3.13 This area is also close to the Calderdale border, therefore the impact of this site and any development close by within Calderdale requires on-going and careful consideration. The current assessment demonstrates that based on existing capacity and trends, and the scale of development proposed, this site will require at least a two form entry primary school to be developed on site, with the possibility of a four form entry, subject to further analysis.

(MX1905) Land east of 932-1110 Leeds Road, Shaw Cross/Woodkirk, Dewsbury

- 3.14 This is a mixed use site which includes 122,500 square metres of employment land and approximately 1500 homes. The site falls within the Dewsbury East and Batley East Primary Planning Areas. Assessment of these within the Securing Sufficient School Places Document (2015) identifies that there will be a requirement for additional primary places through additional infrastructure due to the impact of this site.

- 3.15 The site falls within Secondary Planning Areas of Batley, Birkenshaw, Birstall & Gomersal, and Dewsbury. Assessment within the Securing Sufficient School Places Document (2015) identifies that;

*In the context of the potential impact of proposed strategic site development in the **Local Plan**, it is anticipated that there will be a requirement for additional secondary places. However, a more strategic approach to sufficiency planning will be required across a wider geographical area, including Cleckheaton, Heckmondwike, Liversedge and Mirfield and Dewsbury.*

- 3.16 This site is also close to the Leeds and Wakefield borders, therefore the impact of this site and any development close by within these authorities requires on-going and careful consideration. The current assessment therefore demonstrates that based on existing capacity and trends, and the proposed scale of development, this site will require at least a two form entry primary school building to be developed on site, with the potential of a four form entry, subject to further analysis. In addition, the site would require additional secondary places, either to be commissioned at existing schools, or potentially via on site provision.

Limitations

- 3.17 It is recognised that the exercise of school place planning is complex, and a number of the reasons for this are outlined in the Securing Sufficient School Places Document (2015). It should also be recognised that the phasing table which calculates when development sites will come forward is based on a number of assumptions and has to be treated as broadly indicative. What this analysis does however provide is a strong indication of where future pressures will arise for school places as a result of the draft local plan, and provides a robust evidence base to build on to ensure that investment is made in the right places to insure that the correct infrastructure is in place at the point the need arises.

Conclusions

- 3.18 An assessment had been undertaken to consider the impact of the accepted sites in the draft Local Plan on future learning places. This has been based on the data sets as document in the Securing Sufficient School Places Document (2015) (with some refreshed data incorporated for 2016 to reflect the latest school census data in relation to inter planning area movement, cross LA border movement, and, where applicable changes to the number of available places in 2015/16, for example where new school provision has been introduced.) considering the accepted housing sites in the draft Local Plan and when these are likely to come forward. The planning of school places is complex, as outlined in the Securing Sufficient School Places Document (2015), however this analysis provides an evidence based foundation to establish future interventions and investments to ensure that there are sufficient school places available when developments are completed. The table in Appendix A identifies where further places will be required within 5, 10 and 15 year time frames.
- 3.19 The significant scale of housing proposed at the sites south of Ravensthorpe/Lees Hall Road, Dewsbury, north of Bradley Road, Bradley and east of 932-1110 Leeds Road, Shaw Cross/Woodkirk, Dewsbury will result in a level of need that will require at least a 2 form entry primary school building on each site, with the possible requirement for a 4 form entry school building if the need is established following further analysis. The cumulative scale of development across Dewsbury and Bradley is likely to require new secondary provision.

Early Learning and Childcare Places

- 3.20 The council has a duty to ensure that there is a sufficiency of early learning and childcare places, and this is explained in more detail in the Early Learning and Childcare Strategy 2014-2018. Discussions have been on-going between the Early Learning and Childcare and Planning Policy Teams alongside school place planning discussions due to their integral interrelationship.
- 3.21 Early learning and childcare needs are assessed using council ward boundaries. The phasing assessments for housing sites in the draft Local Plan have been considered by ward by the Early Learning and Childcare Team so that the impact of future growth promoted by the draft Local Plan can be assessed. The methodology and outcomes of this analysis can be found in Appendix B.

Large Strategic Housing Sites

- 3.22 The draft Local Plan includes three sites that each plan for over 1000 dwellings and they have been considered in more detail due to their likely impact on early years and childcare provision. As a result of the assessment that has been undertaken, the following results have been concluded:

(H1747) Land north of Bradley Road, Bradley, Huddersfield also considering growth from adjacent site: (H351) Land north of Bradley Road, Bradley, Huddersfield

- 3.23 The strategic site is likely to generate significant demand for 0-5 early learning and childcare places between 2019 and 2021. In total 88 places will be required which could be one large resource or staged in two average sized resources. Afterschool provision may not be required until around 2026, however this would be best established at a similar time to a new primary school. One resource for 16 places is required. Early learning and childcare should be situated on or very near to a primary school site and have its own secure outside play area.

(H2089) Land to the south of Ravensthorpe/Lees Hall Road, Dewsbury

- 3.24 The strategic site is likely to generate significant demand for 0-5 early learning and childcare places between 2019 and 2021. In total 141 places will be required which could be staged into two large resources over time. Afterschool provision may not be required until around 2022, however this would be best established at a similar time to a new primary school. One resource for 46 places is required. Early learning and childcare should be situated on or very near to a primary school site and have its own secure outside play area.

(MX1905) Land east of 932-1110 Leeds Road, Shaw Cross/Woodkirk, Dewsbury

- 3.25 The strategic site is likely to generate significant demand for 0-5 early learning and childcare places between 2019 and 2021. In total 90 places will be required which could be one large resource or staged into two average resources over time. Afterschool provision may not be required until around 2025, however this would be best established at a similar time to a new primary school. One resource for 26 places is required. Early learning and childcare should be situated on or very near to a primary school site and have its own secure outside play area.

Limitations

- 3.26 The provision of early learning and childcare infrastructure is provided by the public, private, voluntary and independent sectors. The consideration of future provision has to therefore be flexible due to the ability of these sectors to provide future capacity in different ways. It should also be recognised that the phasing table that calculates when development sites will come forward is based on a number of assumptions and has to be treated as broadly indicative.

Conclusions

- 3.27 An assessment had been undertaken to consider the impact of the accepted sites in the draft Local Plan on future early learning and childcare places. This has been based on the findings of the 2015 Kirklees Childcare Sufficiency Assessment considering the accepted housing sites in the draft Local Plan and when these are likely to come forward. The planning of early learning and childcare places is complex, however this analysis provides an evidence based foundation to establish future interventions and investments to ensure that there are sufficient early learning and childcare places available when developments are completed. The table in Appendix B identifies where further places will be required within 5, 10 and 15 year time frames.

4 Transport

Definition and Data Sources

- 4.1 This section covers the transport infrastructure provision across the district including highway, rail, bus, and cycling and pedestrian requirements. This will be followed by a commentary on what schemes are already planned to be implemented and where the funding is coming from. Finally gaps in transport provision are identified and potential funding sources are noted. The majority of this section was drafted by Kirklees Council Officers.
- 4.2 The following sources of information have been used to populate this chapter:
- Meeting with Kirklees Council Transport Team in June 2015;
 - A review of the West Yorkshire Local Transport Plan: My Journey 2011 to 2026;
 - A review of the emerging West Yorkshire Combined Authority Transport Strategy
 - A review of the Leeds City Region Strategic Economic Plan, including the West Yorkshire Transport Fund
 - A review of industry specific development and delivery plans, including Highways England's Road Investment Strategy and Investment Plan (2015-2021) and Network Rail's Enhancement Delivery Plan update (2016)
- 4.3 The provision of transport infrastructure locally will be delivered through the following sources of funding:
- Local Authorities or groups of Local Authorities in England produce and regularly update Local Transport Plans (LTPs). LTPs identify priorities for maintaining and improving local transport systems, based on the needs and wants of residents and organisations in the region, and put forward plans for how they will be achieved. These improvements are then given funding from Central Government to be implemented. Kirklees is part of the West Yorkshire Local Transport Plan partnership. Whilst the Local Transport Plan will be updated and replaced by the West Yorkshire Transport Strategy the current scheme implementation regime will remain.
 - In addition the West Yorkshire Combined Authority, together with the five West Yorkshire local authorities and York have secured funding to establish a £1 billion West Yorkshire plus Transport Fund. The fund will underpin growth by improving the City Region's roads and railways and connecting people to jobs and goods to markets seamlessly over the next 10-15 years.
 - Developer Contributions or Community Infrastructure Levy.
 - Other transport bidding opportunities.

Existing Infrastructure and Fitness for Purpose

Introduction

- 4.4 The population of Kirklees is well dispersed across the district with a lot of areas of relatively high population density requiring access to the main employment centres of Dewsbury and Huddersfield in the district. The Polycentric nature of the wider, regional economy, coupled with Kirklees' strong concentration of manufacturing means there is a need to ensure that now and in the future people and goods can be moved around efficiently, expediently and flexibly.
- 4.5 The number of Kirklees residents who commute outside of the district to work exceeds the number of people commuting in. The most recent census, undertaken in 2011 shows that out-commuters (approximately 60,100) exceeded in-commuters by about 25,500. As might be expected, the flows to and from other parts of the Leeds City Region are larger than those to and from Manchester and Sheffield city regions.
- 4.6 In north Kirklees, the outward flow is partly due to its location and close proximity to the 4 main cities and towns outside Kirklees in the Leeds City Region: Leeds, Wakefield, Halifax and Bradford.
- 4.7 All of these settlements, particularly Leeds provide employment for north Kirklees residents. In 2011 about 12,900 north Kirklees residents worked in Leeds and the total outward flow of north Kirklees residents to jobs elsewhere was 11,200 greater than the corresponding inward flows.
- 4.8 In south Kirklees journey to work patterns to and from destinations outside Kirklees tend to be more problematic than for north Kirklees. This is because trips to and from south Kirklees tend to be longer, many involve the use of the congested M62 or M1 and a greater proportion is by private car. There is bus service provision but it is recognised that it is difficult to serve all origins, frequently and effectively due to the dispersed nature of the population. The Penistone line cuts through the south of the district and provides a link to Huddersfield, Sheffield and destinations beyond but it is infrequent and like the bus service its catchment cannot serve the scattered population of the south of the borough.
- 4.9 There are also significant problems of overcrowding on the Cross-Pennine rail service (see section 4.2.3 Rail Provision).
- 4.10 The ability to move goods and people is particularly important given the district's strategic position on the national motorway and rail networks, its links with regional facilities such as airports/ports and its central position between the Leeds, Sheffield and Manchester City regions gives the district a distinct locational advantage. Efficient access for goods and services is also a key factor in supporting the vitality of our urban areas. The aim is to achieve a balanced and integrated transport network which makes the most efficient and effective use of road, rail and public transport, whilst supporting the traffic generated from new developments as part of the 15 year plan period.

Highways

Strategic Network

- 4.11 The government is directly responsible for the busiest of English roads: the Strategic Road Network. For roads passing through or near Kirklees, this means the M62, the M606, the M1 and the A628.
- 4.12 Kirklees has a number of connections to the strategic motorway network via junctions 23 to 28 of the M62. These provide access to key destinations such as Leeds and Manchester and other employment and service opportunities such as Bradford (via the M606). There is also access to the M1 via junction 40 east of the Dewsbury area and at junction 39 through the Denby Dale area via the A637. This provides access to Leeds, Sheffield and ultimately the North East of England and London.

Local Network

- 4.13 At a regional level, the West Yorkshire Local Transport Plan partnership has created a West Yorkshire Key Route Network² which covers the main strategic roads in West Yorkshire, fulfilling the following criteria:
- the core network where vehicle flows exceed 20,000 vehicles per day and;
 - roads that perform strategic functions by:
 - connecting West Yorkshire Core and Key Centres together
 - connecting these Centres to the Core District Centres within Leeds City Region and adjacent City Regions
 - performing ring road/bypass functions around the five Core District Centres, Key Centres and primary Urban Areas
 - connecting these Centres to the National Strategic Network and its emergency diversion route; and
 - connecting these Centres to Leeds-Bradford International Airport
- 4.14 The key strategic principles of the Key Route Network³ are that it should:
- Facilitate development and economic growth;
 - Reduce journey times and congestion across WY regardless of district boundaries;
 - Assist in the delivery of West Yorkshire plus Transport Fund schemes
 - Enable closer working with Highways England and other combined authorities in the North of England
- 4.15 This network will play a key role in ensuring that Kirklees' development can be accommodated by ensuring and facilitating optimal traffic flow and therefore economic performance. It is envisaged that these roads will be the focus for strategic transport investment going forward.

³ A copy of the network at a West Yorkshire Key Route Network can be found in Appendix D.

- 4.16 The Kirklees district records one Air Quality Management Area ('AQMA') located along the A62 Leeds Road, in the vicinity of the junctions with the A6107 Bradley Road, and with the A644.
- 4.17 In addition to these key strategic routes there are a number of key local pinch points on the network where traffic congestion occurs. The Kirklees Traffic model, developed for the Local Plan has been used to identify these.

Figure 4.2a Kirklees Transport Model Base 2015 Congested Junctions- North Kirklees

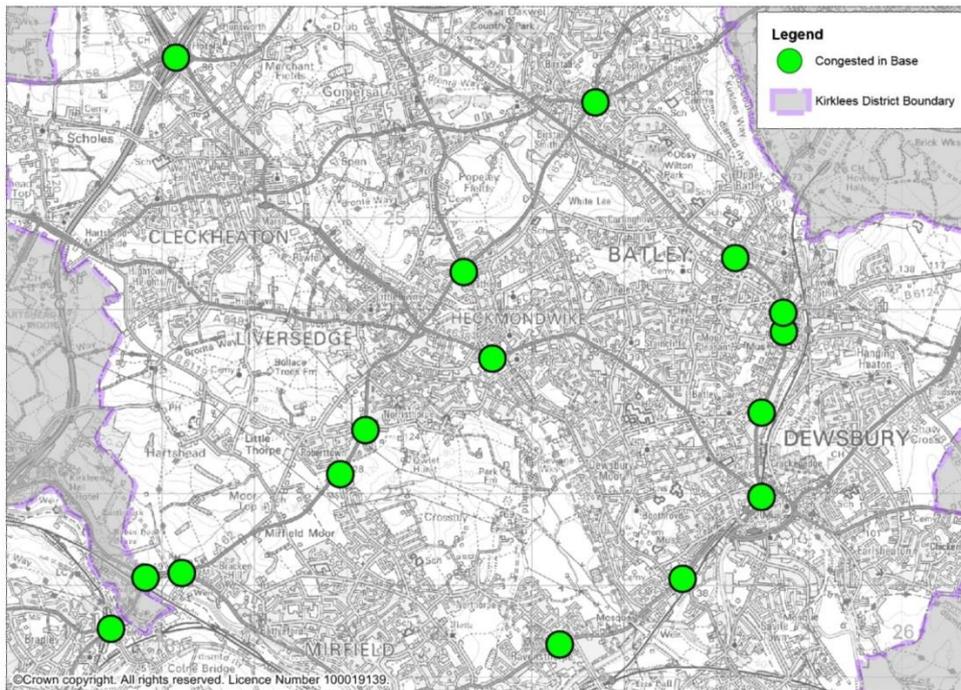
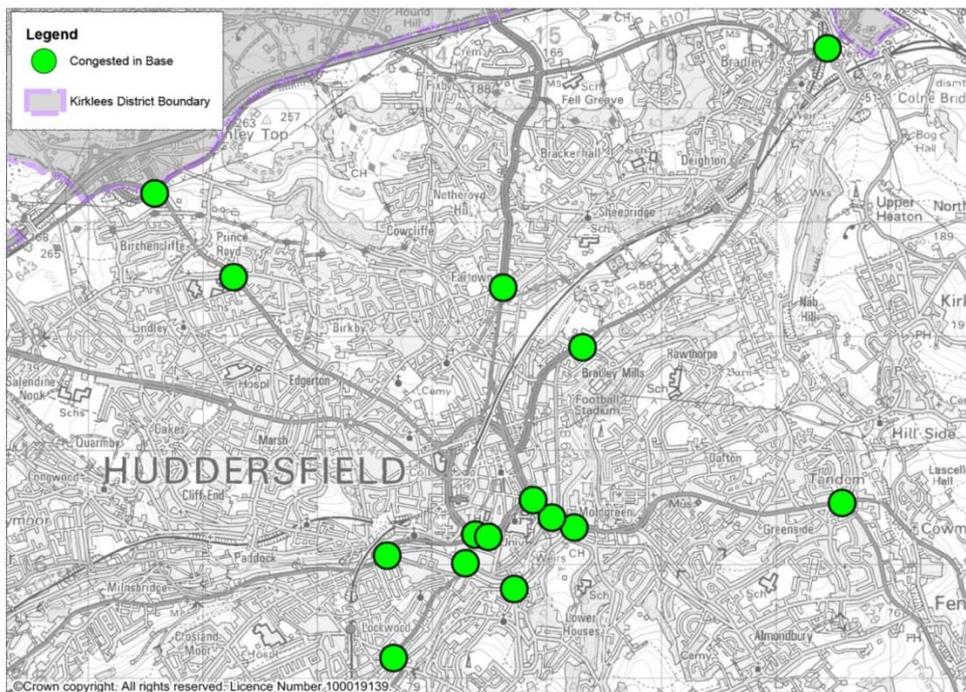


Figure 4.2b Kirklees Transport Model Base 2015 Congested Junctions- South Kirklees



- 4.18 Further information on these locations and how levels of congestion are calculated can be found in the Local Plan Transport Technical Note.⁴
- 4.19 The Kirklees district records one Air Quality Management Area ('AQMA') located along the A62 Leeds Road, in the vicinity of the junctions with the A6107 Bradley Road, and with the A644.

Rail Provision

- 4.20 The main rail route in Kirklees is the East/West Trans-pennine Route which links Huddersfield and Dewsbury to Leeds, York, Manchester and Manchester Airport. This is an important connection to key employment destinations in the City Region and beyond.
- 4.21 Local rail connections to Wakefield provide a further connection to London and North East-bound trains whilst the Penistone Line, which connects a number of rural stations in the south of Kirklees, is an important local connection to the Sheffield City Region and Midland Main Line railway.
- 4.22 There are known issues with capacity between Huddersfield and Leeds and Huddersfield and Manchester, with many peak services experiencing overcrowding. The most recent rail passenger numbers statistics produced by the Department for Transport show that TransPennine and Northern services in the a.m. peak into Leeds show 17% and 15% respectively standing as a percentage of standard class critical loads. The national average is 9%.⁵
- 4.23 The Penistone Line, running between Huddersfield, Barnsley and Sheffield is a single track rural railway currently providing one train an hour in either direction. Demand has been growing rapidly at many of the Penistone Line stations, especially in West Yorkshire, and at rates above those across the railways in general and there is much anecdotal evidence of passenger crowding on trains approaching and departing Huddersfield in the peaks. There is a paucity of car parking at many of the stations along the line with local roads unable to cope with the overspill. This is the case in particularly at Honley and Brockholes.
- 4.24 The rail network has seen significant growth in the last decade. Recent local forecasts undertaken as part of the Yorkshire Rail Network Study 2012⁶ suggest demand across West Yorkshire could be between 21% and 37%.
- 4.25 There are 15 stations within the Kirklees district, split across the Huddersfield Line (8) and the Penistone Line (7). Apart from Huddersfield and Dewsbury which are managed by TransPennine, the rest of the stations are managed by Northern. With the exception of Huddersfield and to a lesser extent Dewsbury, facilities at many of the stations are about

⁴ <https://www.kirklees.gov.uk/beta/planning-policy/pdf/supportingDocuments/methodologyTechnicalPapers/Transport-technical-paper.pdf>

⁵ <https://www.gov.uk/government/statistics/rail-passenger-numbers-and-crowding-on-weekdays-in-major-cities-in-england-and-wales-2015>

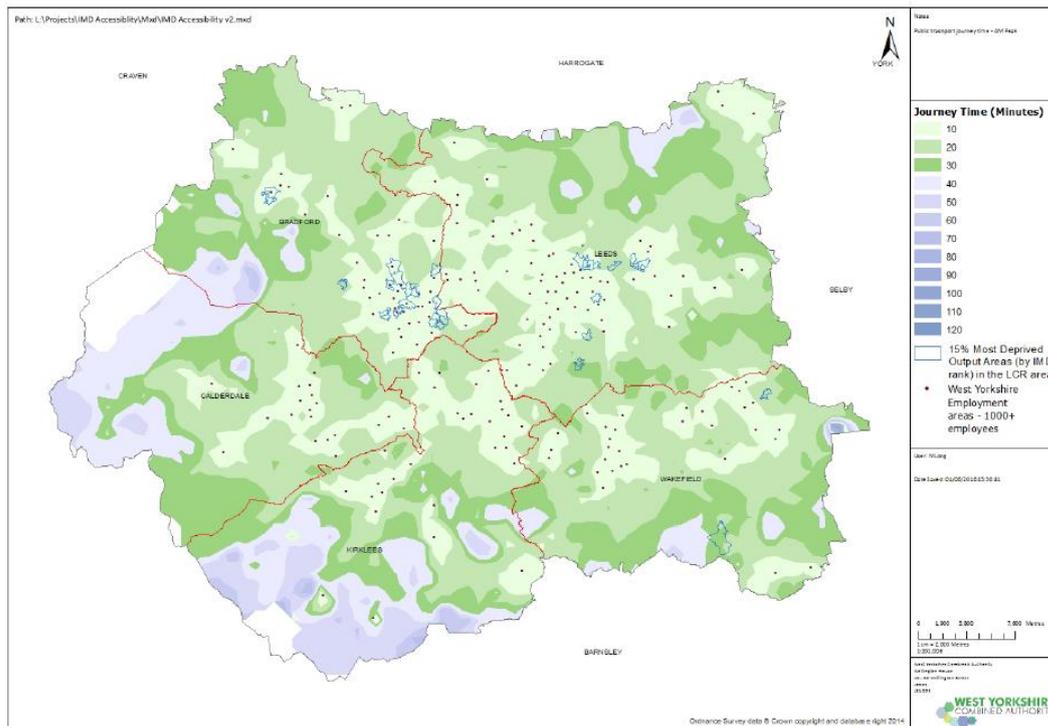
⁶ <http://www.wymetro.com/news/projects/projectdetails/YRNS/>

adequate, although there is room for improvement with the provision of improved lighting, waiting and ticket purchasing facilities identified as priorities.⁷

Bus Provision

- 4.26 In 1986, Implementation of the Transport Act (1985) led to the deregulation of bus services in England, Scotland and Wales, with the exception of London. This introduced competition on local bus services, and meant that local authorities could no longer regulate the routes and fares of the bus operators. Instead they (or Passenger Transport Executives in the case of major conurbations such as West Yorkshire) moved to a role of maintaining common facilities and financing less profitable but socially necessary services.
- 4.27 The situation in 2016 remains unchanged, with the West Yorkshire Combined Authority (WYCA) taking the lead on behalf of Kirklees Council and the wider Leeds City Region in working with private bus operators to bring about improvements to services and better value for money on behalf of local people.
- 4.28 For many years bus passenger numbers have been falling across West Yorkshire. In the six years between 2009/10 and 2015/16 patronage has dropped from 169.2 million per annum to 153.5 million per annum. This is a trend mirrored in Kirklees. Although since deregulation the bus network in Kirklees has also progressively contracted, the district does benefit from an adequate level of bus provision.
- 4.29 To clarify the above statement, access to employment has been a key indicator of the West Yorkshire Local Transport Plan since 2011. It is defined as the percentage of residents able to access key employment sites across West Yorkshire within 30 minutes, using the Core Public Transport Network (bus and rail). The indicator is modelled using TRACC software for trips from home to key employment centres, under the following assumptions:
- The Core Bus Network accounts only for those services that have a combined frequency of 15 minutes or higher.
 - The Core Rail Network includes all rail services.
 - Population figures correspond to updated Office for National Statistics (ONS) mid-year estimates and they are allocated to Lower Layer Super Output Areas (LSOAs) based on the recorded housing completions from Local Authorities.
 - Key employment centres are defined as LSOAs with over 1000 employees, according to Nomis data.
 - A map with the results of the modelling is provided below:
 - The green coloured areas show the zones with good levels of accessibility to key employment centres using the Core Public Transport Network.
 - The purple coloured areas represent those zones with poor accessibility.

⁷https://www.wymetro.com/uploadedFiles/WYMetro/Content/aboutmetro/Local_Transport_Plan/20121017RailPlan7.pdf



4.30 The table below shows how this figure has improved for Kirklees since 2011 and a comparison with West Yorkshire as a whole:

	2011	2012	2013	2014
Kirklees	70%	71%	72%	76%
West Yorkshire	76%	75%	76%	76%

4.31 Current services are mainly concentrated along the corridors between the district’s main towns and the urban areas/villages between them. Metro (now the called the Combined Authority) undertook a review of bus service provision in North and South Kirklees in 2012. This was undertaken primarily to inform the whether the current subsidised network was fit for purpose and whether it provided good value for money. Both reviews concluded that the network could continue to operate in its current form with a number of amendments proposed, primarily around alterations to the tendered service network. This is the network that is supported by the taxpayer and not run for commercial profit by the bus operator. This network can be different routes, but more often than not is geographic or time extensions (early morning, late evening, Sundays) to existing commercial routes.⁸

4.32 The network of bus services in rural south Kirklees is generally good, but here services operate on a lower frequency and greater public subsidy is required to maintain evening and Sunday services.⁹

⁸ <http://www.wymetro.com/consultation/busreview/northkirklees/>

⁹ <http://www.wymetro.com/consultation/busreview/southkirklees/>

Cycling and Walking

- 4.33 Kirklees Council has been developing a more comprehensive walking and cycling network since the adoption of the Unitary Development Plan (*adopted on 1 March 1999*).
- 4.34 In 2000, a core network of proposed new cycling and walking routes, predominately aimed at cycling provision, was established which mainly focused on segregated off-highway (Greenway) facilities. In 2010, the routes were evaluated and prioritised in line with a focus on targeting known areas of poor health in Kirklees and on locations that topographically suited cycling best.
- 4.35 Availability of land or funds to build this planned network has often been difficult to secure and it has not therefore been possible to follow the prioritised build programme. With resources limited, the council has adopted a flexible approach which has used planning gain and funding opportunities to maximise route construction in the district.
- 4.36 This flexible approach has achieved a lot of key cycling links being constructed, although with some routes appearing temporarily incomplete until adjacent phases are built. However, where sections of routes have been built their ability to stand alone has been a key consideration in ensuring maximum benefit to the local area.
- 4.37 Some examples of new key infrastructure are:

Calder Valley and Birkby Bradley Greenways	A mainly traffic-free route between Huddersfield and Dewsbury town centres. Most of the path is built on the former rail corridor of the Midland Railway, with the section from Dewsbury Moor to the town centre on a riverside path. It comprises the Birkby Bradley Greenway NCN Route 69 and Calder Valley Greenway NCN Route 66.
Dewsbury Greenway	A traffic free route forming part of NCN 69 and leading from Dewsbury town centre along the River Calder and along former railway lines connecting to Saville Town, Earlsheaton and Runtlings (Ossett, Wakefield) then by on-road signed route to Ossett Town centre
Spen Valley Greenway and Ringway	A traffic free route forming part of the NCN Route 66 connecting Dewsbury to Oakenshaw, via Ravensthorpe, Heckmondwike, Liversedge, Littletown and Cleckheaton,
Meltham Greenway	First phase is complete. Runs from Station Street, Meltham and passes alongside Morrison's supermarket and out on the former rail corridor to Huddersfield Road at Meltham Mills. Forms part of NCN Route 698

- 4.38 In addition to key routes, minor improvements have been made to the existing highway network introducing cycle lanes, improving pedestrian provision, along with modest investment in the Public Rights of Way Network.

- 4.39 In more recent times, there has been a shift in priority towards the provision of segregated on-highway infrastructure, steered by the West Yorkshire Local Transport Plan (LTP3 2011-2026) and its associated West Yorkshire Cycle Prospectus.
- 4.40 Under the Government's Cycle Cities Ambition Grant funding initiative and in partnership with the West Yorkshire Combined Authorities CityConnect programme, Kirklees Council will start to make some step changes in 2017/18 to on-highway infrastructure within Huddersfield town centre and the ring road that surrounds it.
- 4.41 There is a requirement for significant investment to ensure that Kirklees has a fit-for-purpose walking and cycling network to support the transport needs associated with new housing and employment development within Kirklees over the Local Plan period.

Planned Schemes

- 4.42 This section details what schemes are planned within Kirklees District as a result of:
- Existing local, regional or national delivery plans;
 - The emerging West Yorkshire Transport Strategy; and
 - Analysis undertaken as part of the Local Plan development work

Strategic Highway Network Improvements

- 4.43 The Government owned strategic highways company that manages the national Motorway Network, Highways England, has produced a Roads Investment Strategy 2015-2020. This strategy is informed by a large scale programme of social research undertaken by the Department for Transport to understand how individuals interact with, and perceive, the Motorway Network. In addition a long-term planning and forecasting exercise has been undertaken that, coupled with technical work around existing areas of congestion developed as part of the M62 Route Based Strategy, forms a comprehensive gap analysis. As a result of this work a number of schemes have been proposed to ensure the efficient, safe and expedient operation of the Strategic Road Network going forward and to provide the capacity to accommodate economic growth.
- 4.44 The Roads Investment Strategy includes a long-term funding commitment from Government to support delivery of a programme of works, which for Kirklees includes:

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

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

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

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

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

Local Highway Network Improvements

- 4.46 As part of the preparatory work undertaken for the local plan, a combined simulation and assignment traffic model with a public transport component was produced. The purpose of this model was to:
- Model the existing highway network within Kirklees and how traffic uses it at present.
 - Understand the (cumulative) traffic impact of the site specific allocations of the Kirklees Local Plan on the local highway network
 - Develop realistic mitigation measures to support these allocations and test them to understand not only their benefit but what impact they will have on traffic reallocation across the local highway network.
- 4.47 The traffic model has been used to calculate three scenarios:
1. an existing base scenario in 2015 (i.e. a modelled representation of the highway and public transport network as it currently operates)
 2. A 2020 scenario that includes all development in place with no transport schemes
 3. A 2030 scenario that includes all development in place with no transport schemes
- 4.48 The results of these three scenarios have been reported with an indicator that shows how congested the junction will be in each of these scenarios. The top 30 most congested junctions in each scenario are represented on Figures 4.3.2a and 4.3.2b, overleaf.

Figure 4.3.2a: North Kirklees Congestion at AM Peak (top 30 junctions)

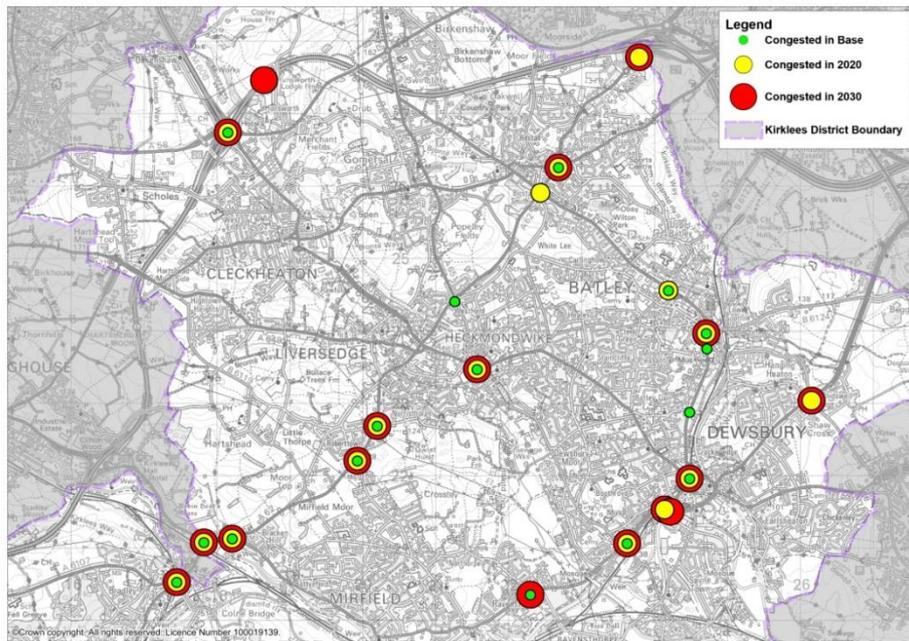
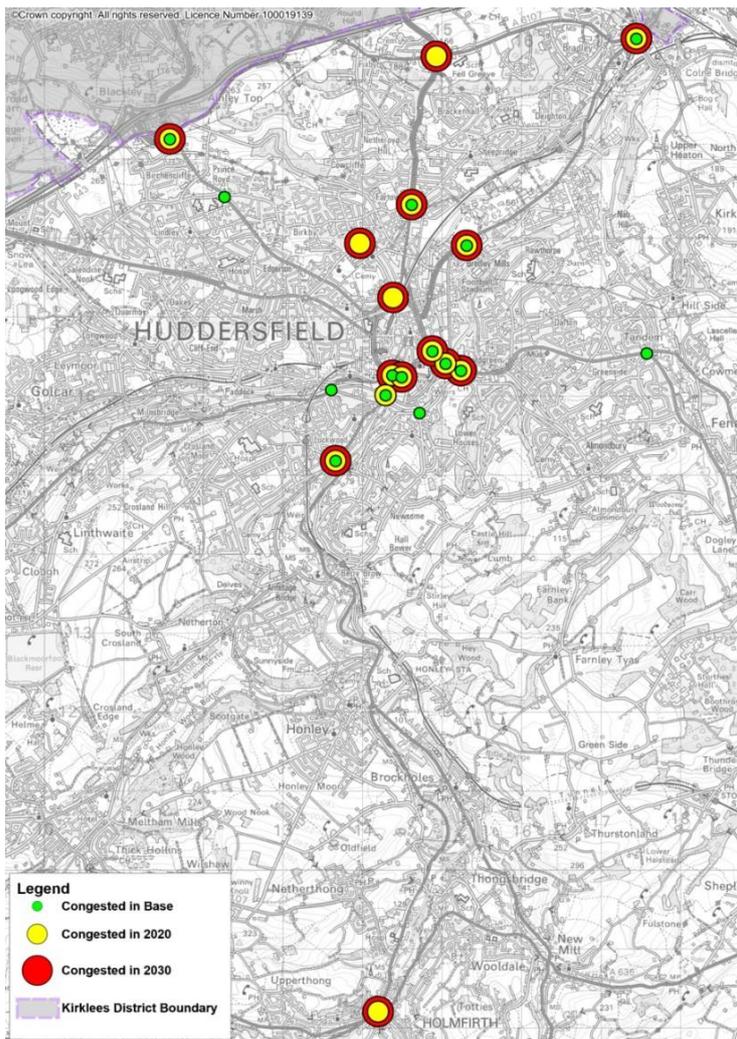


Figure 4.3.2b: South Kirklees Congestion at AM Peak (top 30 junctions)



- 4.49 Congested junctions have been defined as junctions where one arm experiences a flow to capacity ratio exceeding 85% and that arm carries more than 350 passenger car units.
- 4.50 Spatial analysis of these junctions shows that they fall into 9 broad areas/themes and a mitigation strategy has been designed to address the impacts. The references reflect schemes identified in the draft Local Plan. More information about the transport technical model can be found in the Local Plan Transport Technical Paper:

<https://www.kirklees.gov.uk/beta/planning-policy/pdf/supportingDocuments/methodologyTechnicalPapers/Transport-technical-paper.pdf>

- 4.51 The following table shows how, through identified programmes and funding sources, Kirklees intends to address these highway issues, grouped into the 9 broad areas/themes.

Table 4.3.2: Identified programme and funding sources. (A more detailed breakdown of these schemes can be found in Appendix A & F)

Corridor /Area	Location	Programme and funding Opportunity
<p>TS 1</p> <p>Huddersfield to Leeds</p>	<p>Improvements at the following locations:</p> <p>A62 Leeds Road /Bradley Mills Road</p> <p>A62/A6107 (Bradley Road)</p> <p>A62/A644 (Cooper Bridge)</p> <p>A62/A644 (Three Nuns)</p> <p>A62/Sunny Bank Road</p> <p>A62/Norristhorpe Lane</p> <p>A638/High Street/B6117 Market Street</p> <p>A62/A652 (Six Lane Ends)</p> <p>A62/A652 (Birstall Smithies)</p> <p>A62/A643 (Coach and Six)</p>	<p>West Yorkshire Transport Fund Projects:</p> <ul style="list-style-type: none"> • A62/A644 Cooper Bridge Junction • A62 Corridor Improvement Package <p>Community Infrastructure Levy</p>
<p>TS 2</p> <p>New Motorway Junction 24A on the M62</p>	<p>New junction and or improvements at the following locations:</p> <p>Full diamond junction at the overbridge of the A641 (Bradford Road) and the M62</p> <p>A641 Bradford Road/ A6107 Bradley Road</p> <p>A641 Bradford Road/ Spaines Road (Fartown Bar)</p>	<p>West Yorkshire Transport Fund Project :</p> <ul style="list-style-type: none"> • M62 Junction 24a scheme including works to the A641 Bradford Road

	A62 Castlegate/ St Johns Road/ A641 Bradford Road	
TS 3 Huddersfield Southern Gateways	<p>Improvements at the following locations:</p> <p>A62/B6432 (Longroyd Bridge)</p> <p>A616/B6108 (Lockwood Bar)</p> <p>A62/B6432 (Folly Hall)</p> <p>Newsome Road/Kings Mill Lane</p> <p>A62 Queensgate / A616 Chapel Hill / A62 Manchester Road</p> <p>A62Queensgate/Alfred Street</p> <p>A62/A629 (Shorehead)</p> <p>A629/B6432 St Andrews Road</p> <p>A629/Somerset Road</p> <p>A629/A642 (Waterloo)</p> <p>A635/A6024 (Holmfirth)</p>	<p>West Yorkshire Transport Fund Project:</p> <ul style="list-style-type: none"> • A616 Huddersfield to Holmfirth (Huddersfield Southern Gateways) • A629 Wakefield Road <p>Community Infrastructure Levey</p>
TS 4 Halifax Road	<p>Improvements at the following locations:</p> <p>A629 Halifax Road/Blacker Road</p> <p>A629/ East Street (Cavalry Arms)</p> <p>A629 Halifax Road/ A643 Lindley Moor Road (Ainley Top roundabout)</p>	<p>West Yorkshire Transport Fund Project:</p> <ul style="list-style-type: none"> • A629 Corridor
TS 5 Mirfield to Dewsbury to Leeds (including North Kirklees Growth Zone)	<p>Improvements at the following locations:</p> <p>A644/Huddersfield Road/Calder Road/North Road (Ravensthorpe Gyratory)</p> <p>A644 Huddersfield Road/B6117 Thornhill Road</p> <p>A644 Webster Hill / A638 Dewsbury Ring Road</p> <p>A638 Dewsbury Ring Road/A638 Halifax Road</p> <p>A638/Mill Street West</p> <p>A652 Bradford Road/Town Street</p> <p>A652/B6123 (Rouse Mill Lane)</p> <p>A652/B6124 (Soothill Lane)</p> <p>A652/B6128 (Stocks Lane)</p> <p>A653 Leeds Road – B6128 Challenge Way</p>	<p>West Yorkshire Transport Fund Project:</p> <ul style="list-style-type: none"> • Mirfield to Dewsbury to Leeds <p>Community Infrastructure Levey</p>

<p>TS8</p> <p>Highway Network Efficiency Programme (HNEP)</p>	<p>Improvements at the following locations:</p> <p>District-wide:</p> <p>This scheme tackles congestion across West Yorkshire with improvements to traffic control; systems and integration of traffic management and traffic signal control centres.</p>	<p>West Yorkshire Transport Fund Project:</p> <ul style="list-style-type: none"> Highway Network Efficiency Programme
<p>TS9</p> <p>Public Transport Improvement Schemes</p>	<p>Corridor Improvement Programme(CIP)</p> <p>Improvements at the following locations:</p> <p>A62- Huddersfield to Leeds</p> <p>Huddersfield Southern Gateways including key junctions identified through the transport modelling on the A616 and A62 and in Holmfirth town centre</p> <p>A629- Broad Lane to Waterloo.</p> <p><i>These corridors have been grouped into TS1 and TS3 respectively in line with a spatial analysis of the congested junction outputs from the Kirklees Transport model.</i></p> <p>Huddersfield Station Gateway</p> <p>Transpennine Electrification and Huddersfield Station Capacity Improvements</p> <p>Calder Valley Electrification</p> <p>Mirfield Rail Station Parking</p> <p>New platforms and improvements at Ravensthorpe Station</p> <p>Penistone Line Improvements</p> <p>Other Rail Station Improvements</p> <p>At the following locations:</p> <p>Dewsbury</p> <p>Batley</p> <p>Mirfield</p>	<p>West Yorkshire Transport Fund Projects:</p> <ul style="list-style-type: none"> A62 Corridor Improvement Package A629 Corridor Improvement Package Rail Station Parking Improvements <p>Rail Industry delivery Outputs</p> <p>Community Infrastructure Levey</p> <p>Other bidding Opportunities</p>
<p>TS10</p> <p>Walking and Cycling Improvement schemes</p>	<p>Improvements at the following locations:</p> <p>District-wide:</p> <p>A programme of core cycling and walking schemes in around Kirklees connecting to key employment and regeneration sites as per the walking and cycling network.</p>	<p>West Yorkshire Transport Fund Projects:</p> <p>All West Yorkshire Transport Fund projects consider cycling as a core design element.</p> <p>Community Infrastructure Levey</p>
<p>TS11</p>	<p>Junction or route improvements at the following</p>	<p>Central Government Funding through the Roads Investment</p>

Strategic Road Network Improvements	locations: M62/M606/A58/A638 (Chain Bar) M62 Junctions 20-25 Smart Motorway M62 Junction 24 (Northern dumb-bell and link to Ainley Top) M62 Junction 27 (Southern dumb-bell)	Strategy
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Rail Improvements

- 4.52 The main committed rail improvement scheduled to be delivered in the plan period is the electrification of the Huddersfield Line ('Transpennine line'). Network Rail is currently revising the scheme to include upgrades to track and signalling to take the maximum advantage of the investment opportunity.
- 4.53 These further improvements will accommodate the projected growth in train services and significantly improve journey times, helping to support economic growth in the north.
- 4.54 This means the original plan to complete work by 2019 will take longer. Planning for the new, bigger scheme is currently underway¹⁰. A delivery plan is expected in late 2016/early 2017.
- 4.55 The electrification of the Calder Valley railway line following the completion of the Transpennine electrification will provide some benefits to the Kirklees district by allowing Northern Rail (or any future franchise) to operate electric trains from Sowerby Bridge (Calderdale) to Mirfield and the wider Northern Rail network. This scheme currently does not have committed funding.
- 4.56 Kirklees Council has undertaken work, in partnership with Barnsley District Council to understand what improvements may be required to increase the frequency of the Penistone Line from hourly to half hourly. This work indicated that the most cost effective option was to divert the existing Sheffield to Leeds stopping service to serve Sheffield to Huddersfield. This option still requires a variety of additional passing places on the single track section, associated signalling, platform changes and additional rolling stock.
- 4.57 The capital costs associated with this option are £38 Million and the benefit to cost ratio has been calculated at 0.57:1.00. In addition there will be implications for Wakefield, Castleford, and Leeds service. For these reasons Kirklees cannot introduce this as either an essential or desirable scheme in this infrastructure delivery plan and will instead concentrate on "sweating the existing asset", by lobbying for additional carriages (and associated longer platforms) and improved passenger facilities, including more car parking opportunities at rail stations.

¹⁰ https://www.networkrail.co.uk/North_West_electrification.aspx

- 4.58 Rail stations play an integral role in contributing to a seamless public transport journey. However, many stations do not offer the level and quality of facilities passengers now expect. As a result, these nodes are now perceived as a barrier which discourages travel. Successful railway stations should enhance the high quality travel experience and help to contribute economic, social and environmental benefits. Stations must be considered as part of the integrated door-to-door journey experience with examples expected to be entwined into the communities they serve. A successful station should act as a gateway both to the railway (for departing passengers) and the hinterland surrounding the station (for arrivals).
- 4.59 At South Dewsbury, Kirklees Council is investigating the possibility of improving the existing station at Ravensthorpe, including the provision of a new platform for services between Huddersfield and Wakefield to potentially effectuate modal shift and improve the sustainability of the development.
- 4.60 As noted above, improving parking at rail stations, in particular on the Penistone line, but also on the Huddersfield Line, is a priority for Kirklees. These schemes will encourage sustainable employment growth in the main urban centres and support modal shift from car to rail for travel into city centres. In terms of funded schemes, one at Mirfield is specifically identified within West Yorkshire Plus Transport Fund.

Bus Provision Improvements

- 4.61 Whilst there are no known schemes or programmes to increase bus provision, the Combined Authority is currently consulting on a 20 year Bus Strategy. The objectives for the bus strategy are:
- To enable economic growth in West Yorkshire by improving connectivity to areas of economic opportunity.
 - To realise environmental aspirations, including significantly reducing local emissions.
 - To support local communities by providing access to health services, education, employment, leisure and retail destinations.
- 4.62 The Bus Strategy sets the target to grow the number of bus passengers by up to 25% over the next ten years which will be facilitated through 5 over-arching proposals:
1. Consistently excellent customer service across the bus system
 2. To provide modern, coherent and integrated bus services
 3. To provide integrated, simple and affordable bus fares for all
 4. To provide easily accessible and reliable travel information *and* present the bus system as a single network
 5. A modern bus system which contributes to improved air quality.
- 4.63 The delivery of this strategy is split into short and medium-term time horizons:

- 4.64 In the short term, the Combined Authority will be working closely with bus operators to improve aspects the service in accordance with the principles set out in the draft strategy, particularly where there are problems with short-term and relatively inexpensive solutions.
- 4.65 The Combined Authority and the bus operators have agreed a programme of 'quick-win' initiatives that, through working together, aim to be delivered by the end of 2017. The principles for these 'quick-win' initiatives are that they:
- Help contribute to delivery of the strategy;
 - Are deliverable before 2018;
 - Provide benefits to the customer;
 - Are deliverable within the current legislative framework and do not rely on complex legal agreements;
 - Do not require new governance arrangements; and
 - Do not constrain future delivery options.
- 4.66 The 'quick-win' initiatives cover a number of areas, which can be built upon in the longer term. The initiatives include: network stability, communications with young people, air quality, ticketing, punctuality, customer service, information and communications. Kirklees will continue to work with the Combined Authority and Bus Operators identifying improvements to bus services, paying particular attention to the impact these improvements may have on existing users of the highway network.
- 4.67 The strategy has a 20 year planning horizon and in the medium term, in the context of emerging national legislation, the Combined Authority and its partners (including Kirklees Council) will assess how to deliver it. The Combined Authority will develop a Business Case to consider how best to deliver this strategy. The Business Case will be developed in accordance with the HM Treasury Green Book methodology and will consider all the options (including formal partnership and franchising options) to enable the strategy to be realised. It is anticipated that the preferred delivery option will be identified during 2017, such that it can be implemented as soon as possible thereafter, following on from the 'quick wins' initiative. Decisions regarding how the strategy is delivered will be approved once:
- The consultation has concluded and the final version of the bus strategy has been adopted by the Combined Authority;
 - The Bus Services Act is in place; and
 - The final content of the Devolution Deal for this region is known

Cycling and Walking Improvements

- 4.68 The Government has committed to creating a Cycling Nation. In 2014 the government launched an informal consultation on a 10 year Cycling Delivery Plan for England that set out a vision for achieving the step changes required to make walking and cycling the

natural choice for shorter journeys or as part of longer journeys. A government response was given to the consultation in October 2015 together with placing a duty in the Infrastructure Act 2015 requiring government to produce a cycling and walking investment strategy for England. This will naturally require local authorities to develop their own strategies.

- 4.69 The Local Plan identifies preferred locations for the provision of new housing and employment development; consequently, this has identified gaps in the existing and currently proposed walking and cycling network that will need to be addressed.
- 4.70 In order to address these needs and ensure we work towards achieving the overall government objectives, Kirklees Council has developed a Cycling and Walking Strategic Framework along with a Delivery Plan.
- 4.71 The Strategic Framework sets out how the council will work with key partners and the public to increase levels of cycling within the district, including the provision of new infrastructure.
- 4.72 As part of the Local Plan preparatory work, a ‘Core Walking and Cycling Network’ has been identified. It is intended that this will provide a strategic and integrated system of on and off road cycle routes, public footpaths and bridleways that provide opportunity for alternative sustainable means of travel throughout the district and provide efficient links to urban centres and sites allocated for development in the Local Plan.
- 4.73 The network includes existing routes, proposed routes and indicative routes. Existing routes are defined as a combination of roads, public rights of way and greenways. Proposed routes are a combination of existing routes where it is aimed to provide a better standard of provision, for example converting on-road advisory or mandatory cycle lanes to fully segregated routes, and totally new routes such as new greenways. Indicative routes are sections where strategic gaps have been identified in the existing network and where further work will need to be undertaken, throughout the plan period, to define a preferred route.
- 4.74 A plan showing the ‘Core Walking and Cycling Network’ can be found in Appendix E.
- 4.75 A number of key routes for development (in no order of priority) and their potential funding sources are listed below:

Project Name	Location	Programme and Funding Opportunity
Huddersfield Town Centre and Connectivity – Phase 1	Huddersfield town centre and ring road	CityConnect 2
Huddersfield Town Centre and Connectivity – Future phases	Huddersfield town centre and ring road	To be identified
Huddersfield Narrow Canal Towpath – Phase 1	Huddersfield to Milnsbridge	CityConnect 2
Huddersfield Narrow Canal – future phases	Milnsbridge to Marsden (Standedge Tunnel)	To be identified
Calder Valley Greenway, Bradley to	Leeds Road, Bradley (A62) via road/track to	To be identified

Brighouse	canal towpath to Anchor Place Lock	
Dalton to Deighton Greenway	School Lane Dalton to Leeds Road, Deighton	To be identified
Dewsbury Town Centre and Connectivity	Dewsbury - wide	To be identified
Shepley Bridge Marina, Mirfield to Spen Valley Greenway	Northern Riverbank at Shepley Bridge Marina via river and canal paths to New Cut Top Lock/ end of Spen Valley Greenway	To be identified
Spen Valley Greenway (East) extension	End of Spen Valley Greenway to Wakefield / Kirklees Boundary via canal towpath	To be identified
Spen Valley Sports College Link	High Street, Heckmondwike to Walkley Lane / Spen Valley Greenway	To be identified
Spen Valley Ringway-South extension	TBC	To be identified
Birstall to Batley	6 lane ends Birstall to Batley town centre	To be identified
A62 Leeds Road Cycle Super Highway	Southgate to Cooper Bridge	West Yorkshire Transport Fund
A629 Halifax Road	Ainley Top to Huddersfield town centre	West Yorkshire Transport Fund
Birstall to Oakwell	Oakwell Hall Country Park to Howden Clough Beck - Kirklees / Leeds boundary	To be identified
Fenay Greenway	Dalton to Kirkburton	To be identified
Holmfirth to Huddersfield	Route to be identified	To be identified
Pennine Bridleway - Dark Peak Link	Hade Edge (Barnsley Boundary) to Standedge (Oldham Boundary) – majority completed but some sections outstanding	To be identified

Summary of Transport Infrastructure

- 4.76 There are a number of existing highway and rail capacity issues in the district. However, the work undertaken to define the areas of the borough that will be most affected by the proposed development (in terms of the 30 most congested junctions), alongside the identification of transport schemes alongside necessary highway improvements by developers will provide the necessary capacity to allow the planned housing and employment in the district to be delivered.

Appendix A

Draft Local Plan - methodology for establishing the impact on school place planning

Using data already provided by the planning department that has been refreshed following the first stage of consultation, a model, has been developed that provides a firm evidence base for establishing the potential number of additional school places needed over the fifteen year period of the Local Plan.

1. By school place planning area across each year of the implementation period of the Local Plan.
2. Years 0-5-to provide as much clarity and certainly as possible regarding the number of places needed and how this need could be met, whilst taking into account areas where there are existing pressures that are in the process of delivery of are being delivered, e.g. new school building and or expansion of existing school buildings.
Years 6-10-to try and identify what the impact of housing development may look like, making careful assumptions about demography, migration and associated factors, for example trends in relation to a proportion of pupils requiring specialist schools places, those in the independent sector and those electively home educated that affect demand.
Years 11-15- to provide high level estimates

The model is based on the following;

Pupil yield

Primary (R-Y6) - 3 children per 100 houses per year group

For example the Local Plan states 116 family dwellings are anticipated to be built in the Batley primary planning during the course of 2017-18.

Applying the primary pupil yield formula this would generate 24 additional places ($0.03 \times 116 \times 7$)

Secondary (Y7 – Y11) – 2 children per 100 houses per yeargroup

In the same example above; 116 family dwellings in the Batley primary planning during the course of 2017-18.

Applying the secondary pupil yield formula this would generate 12 additional places ($0.02 \times 116 \times 5$)

The number of available places

The number of available places in each planning area is an aggregate of the determined 2017-18 Published Admission Number (PAN) for those schools in each planning area that admit children at Reception for primary and Year 7 for secondary.

NHS data-projected numbers

Using 2015 NHS GP registration data to identify potential demand for school places from those living in the planning area.

This is achieved by using 2015 place planning data that maps potential demand between 2011-2018 for Reception places against the available places as at 2017/18 academic year. To establish potential demand the data used is based on a trend derived from the numbers of those pupils living in each area between 2011-2018. This provides a more accurate understanding of potential demand as smoothing is applied to fluctuations in demand over this period.

Number of unfilled places

This is established by reviewing the actual numbers on roll using school census data from January 2015 and deducting this from the number available places.

Net impact of inward and outward movement

An adjustment needs to be made to account for the movement of children between planning areas, i.e. children living in a particular planning area but attending school in another planning area, because of parental preference, for example. The net impact of this movement needs to be understood in order that a greater level of precision can be achieved in the forecast data.

This is achieved by looking at place planning data that describes the actual movement of three cohorts of pupils from R-Y2 to establish an average. For example Batley in the table below:

Place planning summary for Planning Area 1. Batley	
Place planning data for three cohorts of children : Reception, Y1 and Y2 From NHS Jan 2015 and School Census Jan 2015 <i>Note numbers in [square brackets] show the average number of children per yeargroup</i>	
1435 [478] children live in this PA (NHS) <ul style="list-style-type: none"> • 1130 [377] go to schools in this PA (Census) • 222 [74] go to schools in other Kirklees PAs • 7 [2] go to schools in Leeds LA (previous census) • 76 [25] are not in state funded settings, specialist schools places, EHE. 	1431 [477] children go to school in this PA (Census) <ul style="list-style-type: none"> • 1130 [377] Live in this PA • 291 [97] Live in other PAs • 10 [3] Live outside Kirklees

222 children live in this planning area but go to school in another Kirklees planning area. However, this needs to be offset against that fact that 291 children attend school in Batley that live outside of the planning area and in another Kirklees planning area.

Therefore, in terms of understanding the net impact of this movement (291-222), we can see that this planning area is a net importer of children between these year groups of 69 children, which if divided by three (R-Y2) indicates 23 children that needs to be added to the projected number. In this updated analysis, assumptions have been made about changes to existing trends that take into account the impact of pupil yield as a result of the Local Plan phasing after 5, 10 and 15 years.

Secondary

Secondary analysis follows the same pattern as primary in that the net impact of movement of Kirklees children and young people between planning areas is accounted for.

Cross Border Movement (Primary and Secondary)

Built in to the model is a factor that recognises the net impact of cross LA border movement, calculated in the same way as the net impact of inward/outward movement between Kirklees school planning areas. The data deliberately excludes a number of pupils for whom is it not clear as to the type of education setting that they may or may not be attending.

Local Plan- Assessment of the impact on school places
School Organisation and Planning
September 2015

No anticipated need. There is sufficient capacity in the planning area to absorb growth in pupil population, this may affect well established trends and requires a strategic approach to examine impact on neighbouring planning areas.

Anticipated Need The LA would explore a range of options to commission additional places in partnership with schools/providers in the planning area to identify and agree the best solution to meet the level of anticipated need. This could involve agreements with school to adjust a school(s) Published Admission Number (PAN), where anticipated need is relatively low (1-10) and where adjustments to the organisation of existing accommodation may be able to be made to enable small numbers of additional pupils to be accommodated. It may also involve physical expansion of existing school buildings where anticipated need could not be accommodated through re-organisation of existing space. Options could also include reaching agreements with schools to maximise admission numbers, as well as establishing new school buildings.

High level of anticipated need. This would involve establishing provision that would require a new school building(s) (not necessarily a new school) in order to be able to meet this need over the Local Plan period. The optimum time to introduce additional places into the system would need to be informed by up to date phasing, and so not to destabilise existing organisations.

The LA may also want to explore more creative solutions to meet the need across planning areas, which may reflect the geographical diversity of the borough. Solutions could also involve dialogue with admissions authorities to explore opportunities to examine the way admissions are made to schools.

There is already some identified need to commission additional places, for the purposes of this analysis it has been assumed that the availability of places is sustained at 2017/18 levels with the exception of primary places in Huddersfield North as the LA has a strategy to establish 60 additional places (starting with Reception only) from 2018.

Note* Cohort group. Primary (Reception-Year 6). Secondary (Year 7- 11)

PA No.	Primary Planning area name	IMPACT - 5 years	Comments	CUMULATIVE IMPACT - 10 years	Comments	CUMULATIVE IMPACT - 15 years	Comments
1	Batley	No anticipated need for additional places		No anticipated need for additional places		No anticipated need for additional places	
2	Batley Birstall	No anticipated need for additional places		Anticipated need for 5 additional places	Potential to be met via agreement with local schools to adjust Pupil	No anticipated need for additional places	

PA No.	Primary Planning area name	IMPACT - 5 years	Comments	CUMULATIVE IMPACT - 10 years	Comments	CUMULATIVE IMPACT - 15 years	Comments
					Admission Number		
3	Batley East	No anticipated need for additional places		Anticipated need for establishing up to 3 additional places per cohort group	Potential to be met via agreement with local schools to adjust Pupil Admission Number	Anticipated need for establishing up to 20 places per cohort group	May require new school provision in the planning area/neighbouring area of Dewsbury East
4	Birkenshaw & Gomersal	No anticipated need for additional places		No anticipated need for additional places		No anticipated need for additional places	
5	Cleckheaton	Anticipated need for establishing up to 10 additional places per cohort group	Potential to be met via agreement with local schools to adjust Pupil Admission Number	Anticipated need for establishing up to 30 additional places per cohort group	May require physical expansion of existing school(s) in the planning area	Anticipated need for establishing up to 30 additional places per cohort group	May require physical expansion of existing school(s) in the planning area
6	Colne Valley	No anticipated need for additional places		Anticipated need for establishing up to 5 additional places per cohort group	Potential to be met via agreement with local schools to adjust Pupil Admission Number	Anticipated need for establishing up to 5 additional places per cohort group	Potential to be met via agreement with local schools to adjust Pupil Admission Number
7	Dewsbury East	No anticipated need for additional places		No anticipated need for additional places		Anticipated need for establishing up to 30 additional places per cohort group	May require new school provision in the planning area/neighbouring area of Batley East
8	Dewsbury South	No anticipated need for additional places		No anticipated need for additional places		Anticipated need for establishing up to 60 additional places per cohort group	May require new school provision in the planning area
9	Dewsbury West	No anticipated need for additional places		No anticipated need for additional places		No anticipated need for additional places	
10	Golcar	No anticipated need for additional places		No anticipated need for additional places		No anticipated need for additional places	
11	Heckmondwike	Anticipated need for establishing up to 10	May require physical expansion of existing	Anticipated need for establishing up to	May require physical expansion of existing	Anticipated need for establishing up to 20	May require physical expansion of existing

PA No.	Primary Planning area name	IMPACT - 5 years	Comments	CUMULATIVE IMPACT - 10 years	Comments	CUMULATIVE IMPACT - 15 years	Comments
		additional places per cohort group	school(s) in the planning area	20additional places per cohort group	school(s) in the planning area	additional places per cohort group	school(s) in the planning area
12	Holme Valley	No anticipated need for additional places		No anticipated need for additional places		No anticipated need for additional places	
13	Honley & Meltham	No anticipated need for additional places		No anticipated need for additional places		No anticipated need for additional places	
14	Huddersfield North	High level of anticipated need for establishing up to 40 additional places per cohort group	Assumes additional 60 places planned for 2018 are added over the first five years of the Local Plan. Capacity would therefore increase to 495.	High level of anticipated need for establishing up to 85 additional places per cohort group	A further new 2 form entry (420 places) school building may be required to meet planned growth <u>across the Local Plan period</u>	High level of anticipated need for establishing up to 113 additional places per cohort group	A further new 2 form entry (420 places) school building may be required to meet planned growth <u>across the Local Plan period</u>
15	Huddersfield North West	Anticipated need for establishing up to 38 additional places per cohort group	Potential to review overall capacity in neighbouring planning areas	Anticipated need for establishing up to 52 additional places per cohort group	Potential to review overall capacity in neighbouring planning areas. May require physical expansion of existing school(s)	Anticipated need for establishing up to 53 additional places per cohort group	Potential to review overall capacity in neighbouring planning areas. May require physical expansion of existing school(s)
16	Huddersfield South East	No anticipated need for additional places		No anticipated need for additional places		No anticipated need for additional places	
17	Huddersfield South West	No anticipated need for additional places	Additional 90 places added in 2016. Capacity now increased to 470	No anticipated need for additional places		No anticipated need for additional places	
18	Kirkheaton, Lepton & Grange Moor	No anticipated need for additional places		No anticipated need for additional places		No anticipated need for additional places	
19	Liversedge	Anticipated need for establishing up to 5 additional places per cohort group		Anticipated need for establishing up to 5 additional places per cohort group		Anticipated need for establishing up to 5 additional places per cohort group	
20	Mirfield	No anticipated need for additional places		No anticipated need for additional places		No anticipated need for additional places	

PA No.	Primary Planning area name	IMPACT - 5 years	Comments	CUMULATIVE IMPACT - 10 years	Comments	CUMULATIVE IMPACT - 15 years	Comments
21	Newsome	Anticipated need for establishing up to 26 additional places per cohort group	Potential to review overall capacity in neighbouring planning areas	Anticipated need for establishing up to 31 additional places per cohort group	May require physical expansion of existing school(s) in the planning area	Anticipated need for establishing up to 31 additional places per cohort group	May require physical expansion of existing school(s) in the planning area
22	Shelley	No anticipated need for additional places		No anticipated need for additional places		No anticipated need for additional places	
23	Skelmanthorpe and Denby Dale	No anticipated need for additional places		No anticipated need for additional places		No anticipated need for additional places	

Secondary

PA No.	Secondary Planning area name	IMPACT - 5 years	Comments	CUMULATIVE IMPACT - 10 years	Comments	CUMULATIVE IMPACT - 15 years	Comments
24	Batley, Birkenshaw, Birstall & Gomersal	Anticipated need for 30 additional places per cohort group		Anticipated need for 30 additional places per cohort group sustained		Anticipated need for 30 additional places per cohort group sustained	
25	Cleckheaton, Heckmondwike, Liversedge & Mirfield	Anticipated need for establishing up to 21 additional places per cohort group		By the tenth year, anticipated need for establishing a total of 57 additional places per cohort group		By the fifteenth year, anticipated need for establishing a total of 64 additional places per cohort group	
26	Colne Valley	No anticipated need for additional places		No anticipated need for additional places		No anticipated need for additional places	
27	Denby Dale, Kirkburton &	Anticipated need for establishing up		No anticipated need for additional places	The pupil demographic of	No anticipated need for additional	The pupil demographic of

	Shelley	to 5 additional places per cohort group			those living in the area is not sustained based on 2015 GP registration data	places	those living in the area is not sustained based on 2015 GP registration data
28	Dewsbury	Anticipated need for establishing up to 50 additional places per cohort group		By the tenth year, anticipated need for establishing up to 81 additional places per cohort group		By the fifteenth year, high level of anticipated need for establishing up to 148 additional places per cohort group	
29	Holme Valley, Honley & Meltham	No anticipated need for additional places		No anticipated need for additional places		No anticipated need for additional places	
30	Huddersfield North and West	No anticipated need for additional places		By the tenth year, high level of anticipated need for establishing up to 77 additional places per cohort group		By the fifteenth year, high level of anticipated need for establishing up to 116 additional places per cohort group	
31	Huddersfield South & East and Kirkheaton	No anticipated need for additional places		No anticipated need for additional places		No anticipated need for additional places	
32	Huddersfield South West	No anticipated need for additional places		By the tenth year, anticipated need for establishing up to 22 additional year places per cohort group		By the fifteenth year, high level of anticipated need for establishing up to 54 additional places per cohort group	

Appendix B

Local Plan – Early Learning and Childcare

Phase 2 - considering the impact of proposed developments phased at a ward level (2016)

Methodology

1. Establishing a future demand estimate using a conversion rate of 100 new houses produces 1.5 Early Learning and Childcare places per age group (0 to 5 years). The 1.5 conversion rate is based on the established 3.0 conversion rate used for school places adjusted down on the basis that the total number of Early Learning and Childcare places per age group (0 to 5 years) is approximately half the number of school places required per age group.
2. Four full age groups are used to estimate demand for Early Learning and Childcare to reflect:
 - the effect maternity leave has on the demand for childcare from children under 1 year old
 - the majority of children start school reception the September after their 4th birthday (the demand for reception places is covered in School Place Planning)
3. Early estimates of new demand from the government policy to introduce “30 hours free childcare” for 3 and 4 year olds has been included at a ward level. Further details including the methodology for new demand can be found in the 2016 Kirklees Childcare Sufficiency Assessment (www.kirklees.gov.uk/childcaresufficiency).
4. For after school clubs there is currently approximately 1 place for every 6 children aged 5 to 11 years in Kirklees. Estimated new demand has been calculated by the established 3.0 conversion rate per 100 houses used for school places per year multiplied by 7 year groups and a 17% conversion representing the number of existing places per child. Existing vacancies have been deducted to estimate expected shortfalls in places at a ward level. The resulting conversion is 3.5 after school places required for every 100 homes.

Risks

- No distinction has been made between the type of childcare places required in terms of services design and age range between 0 and 5 years and 5+ years
- Other than “30 hours free childcare”, no assumptions have been included for any other factors influencing future demand (e.g. rising population, political policy and fluctuations in the childcare market)
- Vacant places are based on the best information available at a fixed point in time
- The demand for childcare services in a specific geographical area is challenging to quantify as parental choice is a major factor (e.g. some parents choose to access childcare on their way to work or nearer to their place of work)

Kirklees Local Plan:

Early learning and childcare impact assessment of the phasing of housing developments (October 2016)

No anticipated need. There is sufficient capacity at ward level to absorb anticipated growth in child population (less than 5 places required).

Anticipated need. There is not sufficient capacity at ward level to absorb anticipated growth in child population (5 to 49 places required).

High level of anticipated need. In excess of **50** new early learning and childcare places are expected to be required at ward level to meet this need over the Local Plan period.

Ward No.	Ward	IMPACT	CUMULATIVE IMPACT	
		5 years	10 years	15 years
1	Almondbury	No anticipated need for additional places	No anticipated need for additional places (0-5 years) but 11 after school places (5+ years)	No anticipated need for additional places (0-5 years) 16 after school places (5+ years)
2	Ashbrow	Anticipated need for approximately 27 additional places (0-5 years) and 6 after school places (5+ years)	High level of anticipated need for approximately 97 additional places (0-5 years) and 29 after school places (5+ years)	High level of anticipated need for approximately 147 additional places (0-5 years) and 46 after school places (5+ years)
3	Batley East	Anticipated need for approximately 17 additional places (0-5 years) and 27 after school places (5+ years)	High level of anticipated need for approximately 69 additional places (0-5 years) and 44 after school places (5+ years)	High level of anticipated need for approximately 107 additional places (0-5 years) and 57 after school places (5+ years)
4	Batley West	No anticipated need for additional places	No anticipated need for additional places	No anticipated need for additional places
5	Birstall and Birkenshaw	No anticipated need for additional places	Anticipated need for approximately 10 additional places (0-5 years)	Anticipated need for approximately 13 additional places (0-5 years)
6	Cleckheaton	No anticipated need for additional places	Anticipated need for approximately 11 additional places (0-5 years) and 5 after school places (5+ years)	Anticipated need for approximately 16 additional places (0-5 years) and 7 after school places (5+ years)
7	Colne Valley	No anticipated need for additional places	No anticipated need for additional places	No anticipated need for additional places

Ward No.	Ward	IMPACT	CUMULATIVE IMPACT	CUMULATIVE IMPACT
		5 years	10 years	15 years
8	Crosland Moor & Netherton	Anticipated need for approximately 48 additional places (0-5 years)	High level of anticipated need for approximately 86 additional places (0-5 years) and 16 after school places (5+ years)	High level of anticipated need for approximately 116 additional places (0-5 years) and 26 after school places (5+ years)
9	Dalton	Anticipated need for approximately 14 additional places (0-5 years)	Anticipated need for approximately 26 additional places (0-5 years) and 6 after school places (5+ years)	Anticipated need for approximately 26 additional places (0-5 years) and 6 after school places (5+ years)
10	Denby Dale	No anticipated need for additional places	No anticipated need for additional places	No anticipated need for additional places
11	Dewsbury East	Anticipated need for approximately 26 additional places (0-5 years)	Anticipated need for approximately 37 additional places (0-5 years)	Anticipated need for approximately 38 additional places (0-5 years)
12	Dewsbury South	High level of anticipated need for approximately 83 additional places (0-5 years) and 17 after school places (5+ years)	High level of anticipated need for approximately 146 additional places (0-5 years) and 38 after school places (5+ years)	High level of anticipated need for approximately 212 additional places (0-5 years) and 60 after school places (5+ years)
13	Dewsbury West	No anticipated need for additional places	No anticipated need for additional places	No anticipated need for additional places
14	Golcar	Anticipated need for approximately 19 additional places (0-5 years)	Anticipated need for approximately 23 additional places (0-5 years)	Anticipated need for approximately 26 additional places (0-5 years)
15	Greenhead	No anticipated need for additional places	No anticipated need for additional places	No anticipated need for additional places
16	Heckmondwike	No anticipated need for additional places	No anticipated need for additional places	No anticipated need for additional places
17	Holme Valley North	Anticipated need for approximately 37 additional places (0-5 years) and 26 after school places (5+ years)	Anticipated need for approximately 46 additional places (0-5 years) and 29 after school places (5+ years)	Anticipated need for approximately 46 additional places (0-5 years) and 29 after school places (5+ years)

Ward No.	Ward	IMPACT	CUMULATIVE IMPACT	CUMULATIVE IMPACT
		5 years	10 years	15 years
18	Holme Valley South	Anticipated need for approximately 31 additional places (0-5 years) and 18 after school places (5+ years)	Anticipated need for approximately 40 additional places (0-5 years) and 21 after school places (5+ years)	Anticipated need for approximately 41 additional places (0-5 years) and 21 after school places (5+ years)
19	Kirkburton	High level of anticipated need for approximately 73 additional places (0-5 years)	High level of anticipated need for approximately 99 additional places (0-5 years) and 8 after school places (5+ years)	High level of anticipated need for approximately 99 additional places (0-5 years) and 8 after school places (5+ years)
20	Lindley	High level of anticipated need for approximately 57 additional places (0-5 years)	High level of anticipated need for approximately 94 additional places (0-5 years)	High level of anticipated need for approximately 97 additional places (0-5 years)
21	Liversedge & Gomersal	Anticipated need for approximately 30 additional places (0-5 years)	Anticipated need for approximately 42 additional places (0-5 years)	High level of anticipated need for approximately 52 additional places (0-5 years) and 6 after school places (5+ years)
22	Mirfield	Anticipated need for approximately 25 additional places (0-5 years)	Anticipated need for approximately 35 additional places (0-5 years)	Anticipated need for approximately 35 additional places (0-5 years)
23	Newsome	Anticipated need for approximately 41 additional places (0-5 years) and 32 after school places (5+ years)	High level of anticipated need for approximately 67 additional places (0-5 years) and 41 after school places (5+ years)	High level of anticipated need for approximately 67 additional places (0-5 years) and 41 after school places (5+ years)

Note: Demand for childcare is more transient than this model can represent with parents accessing childcare provision across ward boundaries.

Appendix C – Transport Infrastructure Schemes

Figure 4.4: Summary of Transport Infrastructure

Corridor/ Area	Location	Type of Scheme	Essential/ Desirable	Lead Delivery Agency	Delivery Mechanism	Estimated Cost (£ Millions)	Delivery Phasing (When)	Gaps in Funding	Gap Amount (£Millions)
TS1- Huddersfield to Leeds	A62 Leeds Road /Bradley Mills Road	Junction Improvement	Essential	Kirklees Council / West Yorkshire Combined Authority	Funding Secured through the West Yorkshire Transport Fund	50.0+	Medium Term (5-10 years)	No Gap	0
TS1- Huddersfield to Leeds	A62/A6107 (Bradley Road)	Junction Improvement	Essential	Kirklees Council / West Yorkshire Combined Authority	Funding Secured through the West Yorkshire Transport Fund		Medium Term (5-10 years)		
TS1- Huddersfield to Leeds	A62/A644 (Cooper Bridge)	Junction Improvement	Essential	Kirklees Council / West Yorkshire Combined Authority	Funding Secured through the West Yorkshire Transport Fund		Medium Term (5-10 years)		
TS1- Huddersfield to Leeds	A62/A644 (Three Nuns)	Junction Improvement	Essential	Kirklees Council / West Yorkshire Combined Authority	Funding Secured through the West Yorkshire Transport Fund		Medium Term (5-10 years)		
TS1- Huddersfield to Leeds	A62/Sunny Bank Road	Junction Improvement	Essential	Kirklees Council / West Yorkshire Combined Authority	Funding Sought through the West Yorkshire Transport Fund	0.5-0.75	Medium Term (5-10 years)	Gap	0.5-0.75
TS1- Huddersfield to Leeds	A62/Norristhorpe Lane	Junction Improvement	Essential	Kirklees Council / West Yorkshire Combined Authority	Funding Sought through the West Yorkshire Transport Fund	0.5-0.75	Medium Term (5-10 years)	Gap	0.5-0.75

					Fund				
TS1- Huddersfield to Leeds	A638/High Street/B6117 Market Street	Junction Improvement	Essential	Kirklees Council	CIL	1.0-1.5	Medium Term (5-10 years)	Gap	0.75-1.0
TS1- Huddersfield to Leeds	A62/A652 (Six Lane Ends)	Junction Improvement	Essential	Kirklees Council	LTP	0.25-0.5	Short-Term (0- 5 years)	Gap	0.25-0.5
TS1- Huddersfield to Leeds	A62/A652 (Birstall Smithies)	Junction Improvement	Essential	Kirklees Council	Funding Sought through the West Yorkshire Transport Fund	2.0-3.0	Medium Term (5-10 years)	Gap	2.0-3.0
TS1- Huddersfield to Leeds	A62/A643 (Coach and Six)	Junction Improvement	Essential	Kirklees Council / West Yorkshire Combined Authority	Funding Sought through the West Yorkshire Transport Fund	2.0-3.0	Medium Term (5-10 years)	Gap	2.0-3.0
TS2- New Motorway Junction 24A on the M62	The overbridge of the A641 (Bradford Road) and the M62	Full Diamond Junction	Essential	Kirklees Council / West Yorkshire Combined Authority	Funding secured through the West Yorkshire Transport Fund	50.0+	Longer-Term (10+ years)	No Gap	0
TS 2- New Motorway Junction 24A on the M62	A641 Bradford Road/ A6107 Bradley Road	Junction Improvement	Essential	Kirklees Council / West Yorkshire Combined Authority	Funding secured through the West Yorkshire Transport		Longer-Term (10+ years)		

					Fund				
TS 2- New Motorway Junction 24A on the M62	A641 Bradford Road/ Spaines Road (Fartown Bar)	Junction Improvement	Essential	Kirklees Council / West Yorkshire Combined Authority	Funding secured through the West Yorkshire Transport Fund		Longer-Term (10+ years)		
TS 2- New Motorway Junction 24A on the M62	A62 Castlegate/ St Johns Road/ A641 Bradford Road	Junction Improvement	Essential	Kirklees Council / West Yorkshire Combined Authority	Funding secured through the West Yorkshire Transport Fund	Included above	Longer-Term (10+ years)		
TS3- Huddersfield Southern Gateways	A62/B6432 (Longroyd Bridge)	Junction Improvement	Essential	Kirklees Council / West Yorkshire Combined Authority	Funding Sought through the West Yorkshire Transport Fund	5.0-10.0	Medium Term (5-10 years)	Gap	5.0-10.0
TS3- Huddersfield Southern Gateways	A616/B6108 Lockwood Bar	Junction Improvement	Essential	Kirklees Council / West Yorkshire Combined Authority	Funding Sought through the West Yorkshire Transport Fund	5.0-10.0	Medium Term (5-10 years)	Gap	5.0-10.0
TS3- Huddersfield Southern Gateways	A62/B6432 (Folly Hall)	Junction Improvement	Essential	Kirklees Council	CIL	2.0-3.0	Medium Term (5-10 years)	Gap	2.0-3.0
TS3- Huddersfield Southern Gateways	Newsome Road/Kings Mill Lane	Junction Improvement	Essential	Kirklees Council	LTP	0.75-1.0	Short Term (0-5 years)	Gap	0.75-1.0

TS3- Huddersfield Southern Gateways	A62 Queensgate/A616 Chapel Hill/A62 Man Rd	Junction Improvement	Essential	Kirklees Council	CIL	2.0-3.0	Medium Term (5-10 years)	Gap	2.0-3.0
TS3- Huddersfield Southern Gateways	A62 Queensgate/ Alfred Street	Junction Improvement	Essential	Kirklees Council / West Yorkshire Combined Authority	Funding Sought through the West Yorkshire Transport Fund	2.0-3.0	Medium Term (5-10 years)	Gap	2.0-3.0
TS3- Huddersfield Southern Gateways	A62/A629 (Shorehead)	Junction Improvement	Essential						
TS3- Huddersfield Southern Gateways	A629/B6432 (St Andrews Road)	Junction Improvement	Essential	Kirklees Council	CIL	1.5-2.0	Medium Term (5-10 years)	Gap	1.5-2.0
TS3- Huddersfield Southern Gateways	A629/Somerset Road	Junction Improvement	Essential	Kirklees Council	CIL	1.0-1.5	Medium Term (5-10 years)	Gap	1.0-1.5
TS3- Huddersfield Southern Gateways	A629/A642 (Waterloo)	Junction Improvement	Essential	Kirklees Council / West Yorkshire Combined Authority	Funding Sought through the West Yorkshire Transport Fund	1.5-2.0	Medium Term (5-10 years)	Gap	1.5-2.0
TS3- Huddersfield Southern Gateways	A635/A6024 (Holmfirth)	Junction Improvement	Essential	Kirklees Council / West Yorkshire Combined Authority	Funding Sought through the West Yorkshire Transport Fund	2.0-3.0	Short Term (0-5 years)	Gap	2.0-3.0
TS4- Halifax Road	A629 Halifax Road/Blacker Road	Junction Improvement	Essential	Kirklees Council / West Yorkshire Combined Authority	Funding secured through the West Yorkshire Transport Fund	10.0-15.0	Medium Term (5-10 years)	No Gap	0
TS4- Halifax Road	A629/East Street (Cavalry Arms)	Junction Improvement	Essential	Kirklees Council / West Yorkshire Combined Authority	Funding secured through the West Yorkshire Transport		Medium Term (5-10 years)	No Gap	

					Fund				
TS4- Halifax Road	A629 Halifax Road/ A643 Lindley Moor Road (Ainley Top roundabout)	Junction Improvement	Essential	Kirklees Council / West Yorkshire Combined Authority	Funding secured through the West Yorkshire Transport Fund		Medium Term (5-10 years)	No Gap	
TS5 Mirfield to Dewsbury to Leeds (including NKGZ)	A644/Huddersfield Road/Calder Road/North Road (Ravensthorpe Gyratory)	Junction Improvement	Essential	Kirklees Council / West Yorkshire Combined Authority	Funding Secured through the West Yorkshire Transport Fund, but it is expected that there will be CIL contributions to certain schemes around South Dewsbury and on the A653		Medium Term (5-10 years) and longer term (10+ years)	Partial Gap- to be determined	Partial Gap- to be determined
TS5 Mirfield to Dewsbury to Leeds (including NKGZ)	A644 Huddersfield Road/B6117 Thornhill Road	Junction Improvement	Essential	Kirklees Council / West Yorkshire Combined Authority	Funding Secured through the West Yorkshire Transport Fund, but it is expected that there will be CIL contributions to certain schemes around South Dewsbury and on the A653				
TS5 Mirfield to Dewsbury to Leeds (including NKGZ)	A644 Webster Hill / A638 Dewsbury Ring Road	Junction Improvement	Essential	Kirklees Council / West Yorkshire Combined Authority	Funding Secured through the West Yorkshire Transport Fund, but it is expected that there will be CIL contributions to certain schemes around South Dewsbury and on the	50.0+			

					A653				
TS5 Mirfield to Dewsbury to Leeds (including NKGZ)	A638 Dewsbury Ring Road/A638 Halifax Road	Junction Improvement	Essential	Kirklees Council / West Yorkshire Combined Authority	Funding Secured through the West Yorkshire Transport Fund, but it is expected that there will be CIL contributions to certain schemes around South Dewsbury and on the A653				
TS5 Mirfield to Dewsbury to Leeds (including NKGZ)	A638/Mill Street West	Junction Improvement	Essential	Kirklees Council / West Yorkshire Combined Authority	Funding Secured through the West Yorkshire Transport Fund, but it is expected that there will be CIL contributions to certain schemes around South Dewsbury and on the A653				
TS5 Mirfield to Dewsbury to Leeds (including NKGZ)	A652 Bradford Road/Town Street	Junction Improvement	Essential	Kirklees Council / West Yorkshire Combined Authority	Funding Secured through the West Yorkshire Transport Fund, but it is expected that there will be CIL contributions to certain schemes around South Dewsbury and on the A653				
TS5 Mirfield to Dewsbury to Leeds (including NKGZ)	A652/B6123 (Rouse Mill Lane)	Junction Improvement	Essential	Kirklees Council / West Yorkshire Combined Authority	Funding Secured through the West Yorkshire Transport				

				Authority	Fund, but it is expected that there will be CIL contributions to certain schemes around South Dewsbury and on the A653				
TS5 Mirfield to Dewsbury to Leeds (including NKGZ)	A652/B6124 (Soothill Lane)	Junction Improvement	Essential	Kirklees Council / West Yorkshire Combined Authority	Funding Secured through the West Yorkshire Transport Fund, but it is expected that there will be CIL contributions to certain schemes around South Dewsbury and on the A653				
TS5 Mirfield to Dewsbury to Leeds (including NKGZ)	A652/B6128 (Stocks Lane)	Junction Improvement	Essential	Kirklees Council / West Yorkshire Combined Authority	Funding Secured through the West Yorkshire Transport Fund, but it is expected that there will be CIL contributions to certain schemes around South Dewsbury and on the A653				
TS5 Mirfield to Dewsbury to Leeds (including NKGZ)	A653 Leeds Road – B6128 Challenge Way	Junction Improvement	Essential	Kirklees Council / West Yorkshire Combined Authority	Funding Secured through the West Yorkshire Transport Fund, but it is expected that there will be CIL contributions to certain schemes around South				

					Dewsbury and on the A653				
TS8 Highway Network Efficiency Programme	This scheme tackles congestion across West Yorkshire with improvements to traffic control; systems and integration of traffic management and traffic signal control centres.		Essential	Kirklees Council / West Yorkshire Combined Authority	Funding Secured through the West Yorkshire Transport Fund	5.0-10.0	Short-Term (0-5 years)	No Gap	0
TS9 Public Transport Improvement Schemes	<p>Corridor Improvement Programme(CIP)</p> <p>A62- Huddersfield to Leeds</p> <p>Huddersfield Southern Gateways including key junctions identified through the transport modelling on the A616 and A62 and in Holmfirth town centre</p> <p>A629- Broad Lane to Waterloo.</p> <p>These corridors have been grouped into TS1 and TS3 respectively in line with a spatial analysis of the congested junction outputs from the Kirklees Transport model.</p>		Essential	Kirklees Council / West Yorkshire Combined Authority	Funding Sought through the West Yorkshire Transport Fund	n/a	Short-Term (0-5 years)	Gap	n/a
TS9 Public Transport Improvement Schemes	Huddersfield Station	New Subway and Car Park	Desirable	Kirklees Council / West Yorkshire Combined Authority/Network Rail/TOC	Funding Sought through the West Yorkshire Transport Fund, Private Land Owner, Network Rail and TOC	15.0-20.0	Short-Term (0-5 years)	Gap	10.0-15.0
TS9 Public Transport Improvement	Transpennine Rail Line	Electrification and	Essential	Network Rail	Network Rail CP6 Industry Funding	unknown	Medium Term (5-10 years)	Unknown	unknown

Schemes		Huddersfield Station Capacity Improvements							
TS9 Public Transport Improvement Schemes	Calder Valley Rail Line	Electrification	Desirable	Calderdale Council / West Yorkshire Combined Authority/Network Rail/TOC	TBD (Northern Sparks report)	unknown	Medium Term (5-10 years)	Gap	unknown
TS9 Public Transport Improvement Schemes	Mirfield Rail Station	New off-highway rail station parking	Desirable	Kirklees Council / West Yorkshire Combined Authority/Network Rail	Funding Secured through the West Yorkshire Transport Fund	1.0-1.5	Short-Term (0-5 years)	No Gap	0
TS9 Public Transport Improvement Schemes	Ravensthorpe Station	New Platforms for Wakefield services	Desirable	Kirklees Council / West Yorkshire Combined Authority/Network Rail/ Private Developer	Funding Secured through the West Yorkshire Transport Fund, but it is expected that there will be a CIL contribution	1.0-1.5	Medium Term (5-10 years)	Gap	1.0-1.5
TS9 Public Transport Improvement Schemes	Penistone Line	Line and service enhancements	Desirable	Network Rail/Kirklees Council	TBD	20.0-50.0	Longer-Term (10+ years)	Gap	20.0-50.0
TS9 Public Transport Improvement Schemes	Dewsbury Station	Station Improvements for passengers	Desirable	West Yorkshire Combined Authority/ TOC	Rail Industry/Bidding Opportunities	3.0-5.0	Short-Term (0-5 years)	Gap	3.0-5.0
TS9 Public Transport Improvement Schemes	Batley Station	Station Improvements for passengers	Desirable	West Yorkshire Combined Authority/ TOC	Rail Industry/Bidding Opportunities	0.5-0.75	Short-Term (0-5 years)	Gap	0.5-0.75
TS9 Public Transport Improvement	Mirfield Station	Station Improvements	Desirable	West Yorkshire Combined Authority/	Rail Industry/Bidding	0.75-1.0	Short-Term (0-	Gap	0.75-1.0

Schemes		for passengers		TOC	Opportunities		5 years)		
TS10 Walking and Cycling Improvement Schemes	Huddersfield Town Centre and Connectivity – Phase 1	On and or off highways cycle provision with the potential for other NMU provision (TBD)	Essential	Kirklees Council	CCAG	1.5-2.0	Short-Term (0-5 years)	No Gap	0
TS10 Walking and Cycling Improvement Schemes	Huddersfield Town Centre and Connectivity – Future phases	On and or off highways cycle provision with the potential for other NMU provision (TBD)	Essential	Kirklees Council	LTP/Bidding Opportunities/CIL	5.0-10.0	Short-Term (0-5 years)	Gap	5.0-10.0
TS10 Walking and Cycling Improvement Schemes	Huddersfield Narrow Canal Towpath – Phase 1	On and or off highways cycle provision with the potential for other NMU provision (TBD)	Essential	Kirklees Council	CCAG	0.75-1.0	Short-Term (0-5 years)	No Gap	0
TS10 Walking and Cycling Improvement Schemes	Huddersfield Narrow Canal – future phases	On and or off highways cycle provision with the potential for other NMU provision (TBD)	Essential	Kirklees Council	LTP/Bidding Opportunities/CIL	3.0-5.0	Short-Term (0-5 years)	Gap	3.0-5.0
TS10 Walking and Cycling Improvement Schemes	Calder Valley Greenway: Bradley to Brighouse	On and or off highways cycle provision with	Essential	Kirklees Council	LTP/Bidding Opportunities/CIL	2.0-3.0	Short-Term (0-5 years)	Gap	2.0-3.0

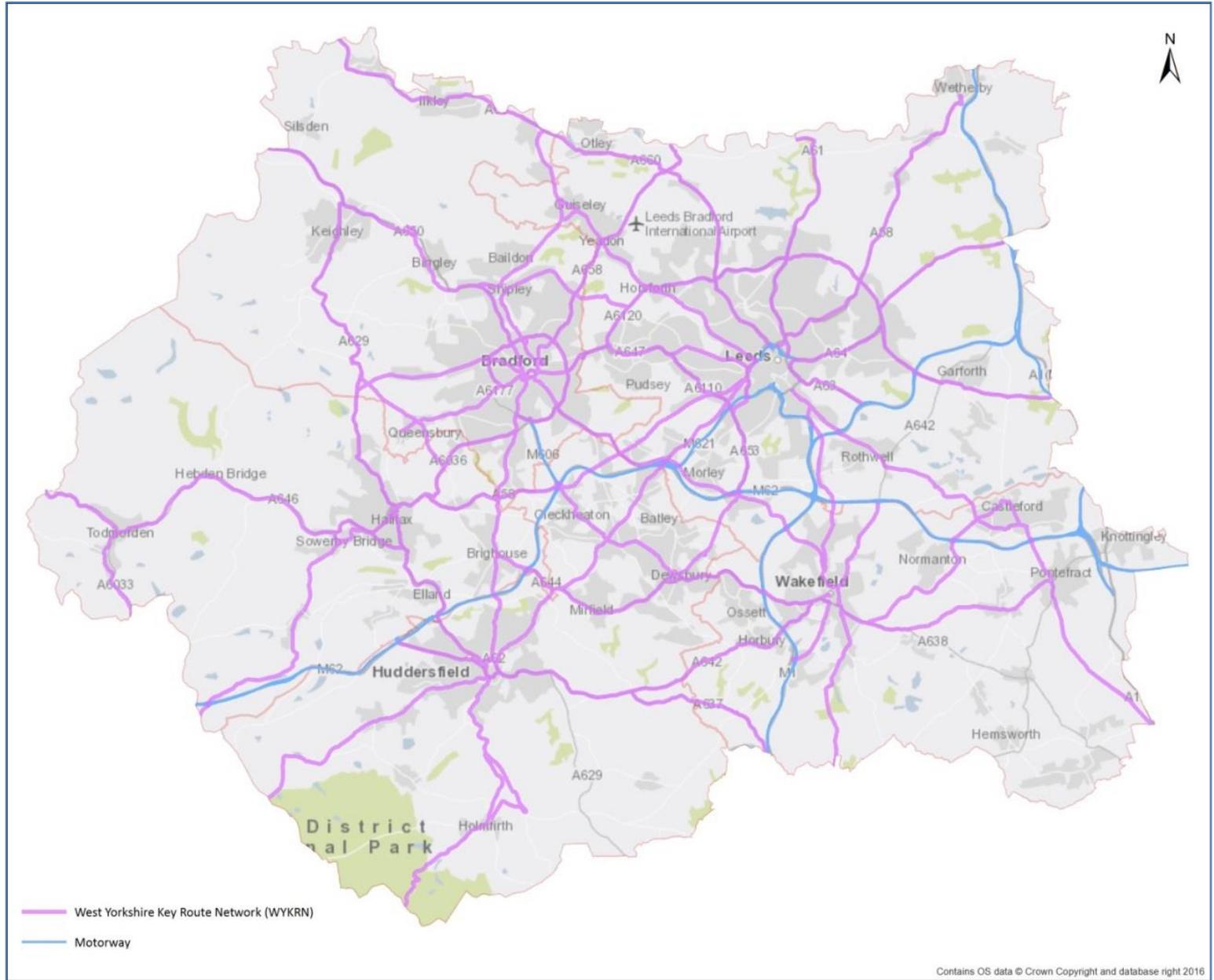
		the potential for other NMU provision (TBD)							
TS10 Walking and Cycling Improvement Schemes	Dalton to Deighton Greenway	On and or off highways cycle provision with the potential for other NMU provision (TBD)	Essential	Kirklees Council	LTP/Bidding Opportunities/CIL	1.0-1.5	Short-Term (0-5 years)	Gap	1.0-1.5
TS10 Walking and Cycling Improvement Schemes	Dewsbury Town Centre and Connectivity	On and or off highways cycle provision with the potential for other NMU provision (TBD)	Essential	Kirklees Council	LTP/Bidding Opportunities/CIL	1.5-2.0	Short-Term (0-5 years)	Gap	1.5-2.0
TS10 Walking and Cycling Improvement Schemes	Shepley Bridge Marina, Mirfield to Spen Valley Greenway	On and or off highways cycle provision with the potential for other NMU provision (TBD)	Essential	Kirklees Council	LTP/Bidding Opportunities/CIL	1.5-2.0	Short-Term (0-5 years)	Gap	1.5-2.0
TS10 Walking and Cycling Improvement Schemes	Spen Valley Greenway (East) extension (Calder & Hebble Canal - Dewsbury to Horbury)	On and or off highways cycle provision with the potential for other NMU provision (TBD)	Desirable	Kirklees Council	LTP/Bidding Opportunities/CIL	2.0-3.0	Short-Term (0-5 years)	Gap	0.5-0.75

TS10 Walking and Cycling Improvement Schemes	Spenn Valley Sports College Link	On and or off highways cycle provision with the potential for other NMU provision (TBD)	Essential	Kirklees Council	LTP/Bidding Opportunities/CIL	1.5-2.0	Short-Term (0-5 years)	Gap	1.5-2.0
TS10 Walking and Cycling Improvement Schemes	Spenn Valley Ringway-south extension (High Street to Walkley Lane, Heckmondwike)	On and or off highways cycle provision with the potential for other NMU provision (TBD)	Essential	Kirklees Council	LTP/Bidding Opportunities/CIL	1.5-2.0	Short-Term (0-5 years)	Gap	1.5-2.0
TS10 Walking and Cycling Improvement Schemes	Birstall to Batley	On and or off highways cycle provision with the potential for other NMU provision (TBD)	Essential	Kirklees Council	LTP/Bidding Opportunities/CIL	2.0-3.0	Short-Term (0-5 years)	Gap	2.0-3.0
TS10 Walking and Cycling Improvement Schemes	A62 Leeds Road Cycle Super Highway	On and or off highways cycle provision with the potential for other NMU provision (TBD)	Essential	Kirklees Council	Potential - West Yorkshire Transport Fund	5.0-10.0	Short-Term (0-5 years)	Gap	5.0-10.0
TS10 Walking and Cycling Improvement Schemes	A629 Halifax Road	On and or off highways cycle provision with the potential for other NMU	Essential	Kirklees Council	Potential - West Yorkshire Transport Fund	2.0-3.0	Short-Term (0-5 years)	Gap	2.0-3.0

		provision (TBD)							
TS10 Walking and Cycling Improvement Schemes	Birstall to Oakwell	On and or off highways cycle provision with the potential for other NMU provision (TBD)	Desirable	Kirklees Council	LTP/Bidding Opportunities/CIL	1.5-2.0	Short-Term (0-5 years)	Gap	1.5-2.0
TS10 Walking and Cycling Improvement Schemes	Fenay Greenway	On and or off highways cycle provision with the potential for other NMU provision (TBD)	Essential	Kirklees Council	LTP/Bidding Opportunities/CIL	2.0-3.0	Short-Term (0-5 years)	Gap	2.0-3.0
TS10 Walking and Cycling Improvement Schemes	Holmfirth to Huddersfield	On and or off highways cycle provision with the potential for other NMU provision (TBD)	Essential	Kirklees Council/ HOTT	LTP/Bidding Opportunities/CIL	3.0-5.0	Short-Term (0-5 years)	Gap	3.0-5.0
TS10 Walking and Cycling Improvement Schemes	Pennine Bridleway - Dark Peak Link	On and or off highways cycle provision with the potential for other NMU provision (TBD)	Desirable	Kirklees Council/ Peak District National Park	LTP/Bidding Opportunities/CIL	1.0-1.5	Short-Term (0-5 years)	Gap	1.0-1.5
TS11 Strategic Network Improvements	M62/M606/A58/A638 (Chain Bar)	Junction Improvements	Essential	Highways England	Central Government Funding	Unknown	Short-Term (0-5 years)	No Gap	0

TS11 Strategic Network Improvements	M62 Junctions 20-25 Smart Motorway	Junction Improvements	Essential	Highways England	Central Government Funding		Short-Term (0-5 years)	No Gap	0
TS11 Strategic Network Improvements	M62 Junction 24 (Northern dumb-bell and link to Ainley Top)	Junction Improvements	Essential	Highways England	Central Government Funding		Short-Term (0-5 years)	No Gap	0
TS11 Strategic Network Improvements	M62 Junction 27 (Southern dumb-bell)	Junction Improvements	Essential	Highways England	Central Government Funding		Short-Term (0-5 years)	No Gap	0

Appendix D – West Yorkshire Key Route Network



Appendix F - Infrastructure Delivery Programme - Transport

Ref	Location (Where)	Scheme	Essential / Desirable	Need for scheme (Why)	Requirements of scheme / comments	Lead delivery agency/ management organisation	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding	Baseline source
Transport											
TS1	A62 Huddersfield To Leeds	Junction Improvements at key locations between Huddersfield Ring Road and the Leeds City Council administrative border	Essential	Improved access to the M62 will provide wider connectivity improvements. The scheme also supports employment growth in the Cooper Bridge area and general development growth along Leeds Road corridor by providing better access to and from existing and new housing in Huddersfield, Dewsbury, North Kirklees and parts of Calderdale, in particularly South Dewsbury and Bradley. The scheme also addresses local air quality issues	<p>Major transport scheme to deal with existing congestion on a major route through Kirklees between Huddersfield and Leeds, that also provides access to many settlements and proposed development along it. The scheme will address congestion in and around Cooper Bridge gyratory to the east of Huddersfield and will accommodate access to a major employment allocation at Cooper Bridge.</p> <p>A number of other junctions along this corridor and approaching Cooper Bridge roundabout from all directions will also require capacity and safety improvements for all users. Junctions in the North of Kirklees will be improved allowing communities access to the M62, Leeds and destinations on the major North-South road and rail corridors (the M1 and East Coast Mainline)</p> <p>Scheme Detail: Improvements at the following locations:</p> <ul style="list-style-type: none"> • A62 Leeds Road /Bradley Mills Road • A62/A6107 (Bradley Road) • A62/A644 (Cooper Bridge) • A62/A644 (Three Nuns) • A62/Sunny Bank Road • A62/Norristhorpe Lane • A638/High Street/B6117 Market Street • A62/A652 (Six Lane Ends) • A62/A652 (Birstall Smithies) • A62/A643 (Coach and Six) 	Kirklees Council / West Yorkshire Combined Authority)	<p>In some cases, funding Secured through West Yorkshire Plus Transport Fund WY+TF</p> <p>In other cases funding will be sought from additional West Yorkshire plus Transport Fund funding streams</p> <p>The scope of the works required and the funding streams from the Fund are currently being defined.</p>	£50+m	Medium term (5-10 years), although some schemes will be brought forward as short term (0-5 years) if development requires them to be.	Gap	<p>Kirklees Council Cabinet Report entitled "WY+TF"(April 2013)</p> <p>Kirklees Council Cabinet Report entitled "WY+TF Scheme Principles"(Feb 2016)</p> <p>Updated Kirklees Internal Project Reviews</p>
TS2	Huddersfield	New Motorway Junction 24a on the M62	Essential	<p>Scheme comprises a new motorway junction to tackle regular delays and queuing vehicles backing up on the M62.</p> <p>Supports the growth of the Cooper Bridge employment site and the Leeds Road corridor and accommodates housing allocations around the North and East of Huddersfield.</p>	<p>Scheme Detail: New junction and or improvements at the following locations:</p> <p>A641 Bradford Road/ A6107 Bradley Road</p> <p>Full diamond junction at the overbridge of the A641 (Bradford Road) and the M62</p> <p>A641 Bradford Road/ Spaines Road (Fartown Bar)</p> <p>A62 Castlegate/ St Johns Road/ A641 Bradford Road</p>	Kirklees Council West Yorkshire Combined Authority (WYCA)	<p>The scheme has funding allocated in the Yorkshire Plus Transport Fund WY+TF, but is not currently in Highways England's Road Investment Strategy.</p> <p>Work is currently being undertaken in partnership with Highways England to understand in detail the full economic benefits of the scheme for both the local and the strategic network.</p>	£50 +m	Medium term (5-10 years) 2021/22	No gap	<p>Kirklees Council Cabinet Report entitled "WY+TF"(April 2013)</p> <p>Kirklees Council Cabinet Report entitled "WY+TF Scheme Principles"(Feb 2016)</p> <p>Updated Kirklees Internal Project Reviews</p>
TS3	South Kirklees	Junction Improvements at key locations on the southern radial	Essential	Accommodates the impact of new development in South Kirklees at key	<p>Improvements at the following locations:</p> <ul style="list-style-type: none"> • A62/B6432 (Longroyd Bridge) • A616/B6108 (Lockwood Bar) 	Kirklees Council West Yorkshire Combined	In some cases, funding Secured through West Yorkshire Plus	£50+, but many individual elements	Medium term (5-10 years), although some schemes will be	Some Gaps	Kirklees Council Cabinet Report entitled "WY+TF Scheme

Appendix F - Infrastructure Delivery Programme - Transport

Ref	Location (Where)	Scheme	Essential / Desirable	Need for scheme (Why)	Requirements of scheme / comments	Lead delivery agency/ management organisation	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding	Baseline source
		routes into and Huddersfield		strategic junctions, reduces congestion and improves connectivity to Huddersfield and destinations beyond	<ul style="list-style-type: none"> A62/B6432 (Folly Hall) Newsome Road/Kings Mill Lane A62 Queensgate / A616 Chapel Hill / A62 Manchester Road A62Queensgate/Alfred Street A62/A629 (Shorehead) A629/B6432 St Andrews Road A629/Somerset Road A629/A642 (Waterloo) A635/A6024 (Holmfirth) 	Authority (WYCA)	<p>Transport Fund WY+TF</p> <p>In other cases funding will be sought from additional West Yorkshire plus Transport Fund funding streams</p> <p>The scope of the works required and the funding streams from the Fund are currently being defined, but it expected that a mixture of funding will be used to bring this programme forward, including Local Transport Funding and CIL</p>	are around £5m	brought forward as short term (0-5 years) if development requires them to be.		Principles”(Feb 2016) Updated Kirklees Internal Project Reviews
TS4	Huddersfield	Halifax - Huddersfield A629 Corridor	Essential	Accommodates growth from local plan allocations North of Huddersfield and supports more efficient commuting between Halifax and Huddersfield, as well as better access to the two centres to/from the M62. This would support employment growth. Businesses in Calderdale and Kirklees would become better connected to labour markets across West Yorkshire	<p>Scheme Detail</p> <p>The scheme includes major and minor junction and highway link improvements for access into Huddersfield along the corridor. Options for express buses are also under consideration.</p> <p>Improvements at the following locations:</p> <ul style="list-style-type: none"> A629/Halifax Road/Blacker Road (to reduce congestion at Blacker Road/St. John's Road due to rerouting to avoid the A629) A629/ East Street (Cavalry Arms) Ainley Top <p>Selected links between these junctions, including traffic management treatment (such as reducing instances of on-street parking and loading to ensure optimal operation efficiency of the highway.</p>	Kirklees Council West Yorkshire Combined Authority (WYCA)	Funding secured through West Yorkshire Plus Transport Fund WY+TF Progressing towards Gateway 1 submission.	£11m	Short term (0-5 years) with more complex elements coming forward in the medium term (5-10 years)	No gap	<p>Kirklees Council Cabinet Report entitled “WY+TF”(April 2013)</p> <p>Kirklees Council Cabinet Report entitled “WY+TF Scheme Principles”(Feb 2016)</p> <p>Updated Kirklees Internal Project Reviews</p>
TS5	Mirfield to Dewsbury to Leeds and North Kirklees Growth Zone	A653 Leeds Road corridor	Essential	Impact for Kirklees: Reduce bi-directional journey times for all modes on the A653 and A644 corridors and Improve access to the M1 and M62, allowing businesses in North Kirklees to become better connected to labour	<p>Area wide and corridor highway, public transport, cyclist and pedestrian improvements to address local congestion issues and the associated impact of a large housing allocation in South Dewsbury and a large mixed use allocation in Chidswell.</p> <p>There will be improvements along the A653 corridor between Dewsbury and Leeds, in particular at the junction of the A653 and B6128 (Shaw Cross) to facilitate improvements to bus and car journey times between Dewsbury and Leeds, proving more efficient journeys to Leeds city centre, White Rose, Aire Valley and the M62</p>	Kirklees Council West Yorkshire Combined Authority (WYCA)	<p>In most cases, funding Secured through West Yorkshire Plus Transport Fund WY+TF</p> <p>The scope of the works required and the funding streams from the Fund are currently being defined, but it</p>	£50+m	Medium term (5-10 years) with more complex elements coming through in the longer term (10+ years)	No gap	<p>Kirklees Council Cabinet Report entitled “WY+TF”(April 2013)</p> <p>Kirklees Council Cabinet Report entitled “WY+TF Scheme Principles”(Feb</p>

Appendix F - Infrastructure Delivery Programme - Transport

Ref	Location (Where)	Scheme	Essential / Desirable	Need for scheme (Why)	Requirements of scheme / comments	Lead delivery agency/ management organisation	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding	Baseline source
				<p>markets across West Yorkshire.</p> <p>'Kick-start' the transformative change of the urban centre of Dewsbury by encouraging investment and inward migration into the local area. Enhancing connectivity for walking and cycling between Dewsbury and its neighbourhoods and the associated uptake in active travel will improve the general health of the residents in the area. An improvement to public transport provision along the key route network will reduce the impact on air quality associated with overuse of the private car.</p> <p>The scheme will provide for future housing and employment growth in the local area and also maximise the benefits of the Bradford Road corridor as a well-developed and popular employment location and entertainment destination.</p>	<p>corridor and to accommodate a major mixed-use allocation in Chidswell.</p> <p>Junction improvements and road space reorganisation along the A652 in Batley which will provide benefits for all road users.</p> <p>The benefits of these schemes will be realised in Dewsbury where a significant amount of public realm work will be undertaken, in particular by downgrading Dewsbury Ring Road where capacity exceeds demand to aid access and connection to the town centre</p> <p>Improvements at the following locations:</p> <ul style="list-style-type: none"> • A644/Huddersfield Road/Calder Road/North Road (Ravensthorpe Gyratory) • A644 Huddersfield Road/B6117 Thornhill Road • A644 Webster Hill / A638 Dewsbury Ring Road • A638 Dewsbury Ring Road/A638 Halifax Road • A638/Mill Street West • A652 Bradford Road/Town Street • A652/B6123 (Rouse Mill Lane) • A652/B6124 (Soothill Lane) • A652/B6128 (Stocks Lane) • A653 Leeds Road - B6128 Challenge Way 		<p>expected that a mixture of funding will be used to bring this programme forward, including Local Transport Funding and CIL</p>				<p>2016)</p> <p>Updated Kirklees Internal Project Reviews</p> <p>West Yorkshire and York Investment Committee Report "Capital Spending and Project Approvals" (Sep 2016)</p>
TS8	District Wide	Highway Network Efficiency Programme	Essential	<p>Congestion and delays will be reduced at hotspots across West Yorkshire meaning more reliable journeys for commuters, freight users and bus passengers.</p>	<p>This scheme tackles congestion across West Yorkshire with improvements to traffic control systems and integration of traffic management and traffic signal control centres. This will facilitate the creation of management plans for specific corridors tailored to reduce congestion and delays. It will also provide better resilience to extreme weather events. Introduction of small-scale traffic signal improvements on a defined West Yorkshire key route network and the introduction of a West Yorkshire Common Database for more reactive traffic signal monitoring and real time information</p>	<p>Kirklees Council West Yorkshire Combined Authority (WYCA)</p>	<p>Funding secured through West Yorkshire Plus Transport Fund WY+TF Gateway 1 Submission Dec 2015</p>	<p>£7.3m (across West Yorkshire)</p>	<p>Short term (0-5 years)</p>	<p>No gap</p>	<p>Kirklees Council Cabinet Report entitled "WY+TF"(April 2013)</p>

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Ref	Location (Where)	Scheme	Essential / Desirable	Need for scheme (Why)	Requirements of scheme / comments	Lead delivery agency/ management organisation	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding	Baseline source
					dissemination to deal with events on the highway.						
TS9	District wide	Corridor Improvement Programme (was called Highways Efficiency and Bus Priority Programme)	Essential	A comprehensive and substantial upgrade of all core routes across West Yorkshire to reduce congestion, improve reliability and speed up journey times. Route-by-route, a mix of measures will be applied to tackle congestion hotspots, improve junctions and better manage parking whilst improving conditions for pedestrians, cyclists and local businesses and communities. The bus element is targeted at reducing operating costs by speeding up journey times, converting the fleet to operate on lower carbon alternative fuels and improving passenger information.	<ol style="list-style-type: none"> 1. A62- Huddersfield to Leeds 2. Huddersfield Southern Gateways including key junctions identified through the transport modelling on the A616 and A62 and in Holmfirth town centre 3. A629- Broad Lane to Waterloo. <p>These corridors have been grouped into TS1 and TS3 respectively in line with a spatial analysis of the congested junction outputs from the Kirklees Transport model.</p>	Kirklees Council West Yorkshire Combined Authority (WYCA)	Funding is currently being sought from the West Yorkshire Transport Fund	TBC	Short term (0-5 years) with more complex elements coming forward in the medium term (5-10 years)	Gap	<p>Kirklees Council Cabinet Report entitled "WY+TF"(April 2013)</p> <p>Kirklees Council Cabinet Report entitled "WY+TF Scheme Principles"(Feb 2016)</p> <p>Updated Kirklees Internal Project Reviews</p>
TS9	Huddersfield	Huddersfield Station Gateway	Desirable	Provision of high quality rail infrastructure contributes to modal shift away from the private car which in turn reduces congestion. It also encourages investment and builds on regeneration already taking place around the station	Provision of car parking on the St Georges Square Warehouse, a new subway linking the car parking to Huddersfield Station which will improve the experience for existing users but also address the suppressed demand for rail parking	Kirklees Council / West Yorkshire Combined Authority/Network Rail/TOC	Funding Sought through the West Yorkshire Transport Fund, Private Land Owner, Network Rail and TOC	£15.0m-20.0m	Short term (0-5 years)	Gap	<p>Kirklees Council Cabinet Report entitled "WY+TF"(April 2013)</p> <p>Kirklees Council Cabinet Report entitled "WY+TF Scheme Principles"(Feb 2016)</p> <p>Updated Kirklees Internal Project Reviews</p>
TS9	Huddersfield and Dewsbury / Mirfield	Electrification of the Trans Pennine Line from York to Manchester to reduce journey times to 35 minutes between Leeds and	Essential	Increase frequency of service and journey times	Stimulate economic growth in the north of England through better connections between key towns and cities, which will improve the attractiveness of Huddersfield as a location to invest in.	Department for Transport / Network Rail	Network Rail CP6 Industry Funding	Unknown	Medium Term (5-10 years)	Unknown	<ul style="list-style-type: none"> • Northern Hub • NR LTPP • Rail North LTRS

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Ref	Location (Where)	Scheme	Essential / Desirable	Need for scheme (Why)	Requirements of scheme / comments	Lead delivery agency/ management organisation	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding	Baseline source
		Manchester and provide six trains per hour									
TS9	District Wide	Calder Valley Electrification	Desirable	Enhance services on the Caldervale Line where service quality is currently poor.	<p>Line-speed and capacity improvements, including improved rolling stock and electrification, to enable faster inter-urban long-distance services, and more frequent commuter services.</p> <p>Following the electrification of the Transpennine line this would allow electric trains to operate between Sowerby Bridge and Mirfield.</p> <p>The Electrification Task force ranked this line as tier one scheme, which means it should be progressed through outline base case work to feed into the initial industry plan / High Level Output Statement for Network Rail's Control Period 6, which runs for five years from 2019.</p> <p>The Calder Valley Line is included in the 2009 RUS, but is not prioritised. The RUS is currently being refreshed by Network Rail.</p>	Department for Transport / Network Rail/West Yorkshire Combined Authority	TBD (Northern Sparks report)	unknown	Medium Term (5-10 years)	Gap	Network Electrification Rail Utilisation Strategy (RUS), 2009. Northern Sparks Report
TS9	District	Mirfield Railway Station	Desirable	Extension to the existing car park will enhance connectivity to, from and within West Yorkshire. The scheme will deliver localised benefits as a result of improved access to the rail network. The scheme will support housing and employment growth, particularly in South Dewsbury	The scheme is designed to support sustainable employment growth in the main urban centres and will particularly benefit commuters, but also support more travel into the urban centres by rail.	Kirklees Council West Yorkshire Combined Authority (WYCA)	Funding secured through West Yorkshire Plus Transport Fund WY+TF	£0.5-£1.0m	Short Term (0-5 years)	No gap	West Yorkshire Combined Authority Meeting Feb 2016
TS9	South Dewsbury	Ravensthorpe Railway Station	Desirable	Provision of high quality rail infrastructure contributes to modal shift away from the private car which in turn reduces congestion allowing improvements in air quality. Improved transport connections allow a greater range of employment opportunities to be reached, encouraging	New platforms at Ravensthorpe Station will allow for a greater range of destinations, particularly for the proposed housing growth in South Dewsbury	Kirklees Council / West Yorkshire Combined Authority/Network Rail/ Private Developer	Funding Secured through the West Yorkshire Transport Fund, but it is expected that there will be a CIL contribution	1.0-1.5	Medium Term (5-10 years)	Gap	Internal Station Development Work and Forecasting

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Ref	Location (Where)	Scheme	Essential / Desirable	Need for scheme (Why)	Requirements of scheme / comments	Lead delivery agency/ management organisation	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding	Baseline source
				inward migration to the area, which in turn results in benefits for the local economy and a resultant regenerative effect.							
TS9	South Kirklees	Penistone Rail Line	Desirable	Provision of high quality rail infrastructure contributes to modal shift away from the private car which in turn reduces congestion allowing improvements in air quality. Improved transport connections allow a greater range of employment opportunities to be reached, encouraging inward migration to the area, which in turn results in benefits for the local economy and a resultant regenerative effect.	Infrastructure or selective door opening to allow longer trains, more frequent services and consideration of future light rail solution. Potential for additional parking at stations on the route/formalise on street parking to be investigated	Network Rail/Kirklees Council	TBD	20.0-50.0	Longer-Term (10+ years)	Gap	Internal Penistone Line Development Work and Forecasting
TS9	Dewsbury	Dewsbury Railway Station	Desirable	As the gateways to our communities, there is a need to improve the customer experience at rail stations as well as access to them. Opportunities to finance station improvements exist in the current Northern and Transpennine rail franchises To ensure that West Yorkshire is well placed to capitalise on rail industry/franchise funding, a number of high level station development plans have been developed to help identify improvements and express the case for station investment	<ul style="list-style-type: none"> • DDA Access to 1 Platform • Ticket Gates • Lighting Enhancements • Improved Wayfinding • Improved Information Provision • Station refresh • New Large Car Park • Disabled Toilet • Booking Office/Kiosk • Urban Realm • Bus Interchange 	West Yorkshire Combined Authority/ TOC	Rail Industry/Bidding Opportunities	3.0-5.0	Short-Term (0-5 years)	No Gap (Commercial Scheme)	WYCA Station Development Plans
TS9	Batley	Batley Railway Station	Desirable	As the gateways to our communities, there is a need to improve the customer experience at rail stations as well as access to them. Opportunities to finance station improvements exist in the current Northern and Transpennine rail franchises To ensure that West Yorkshire is well placed to capitalise on rail industry/franchise funding, a number of high level station development plans have been developed to help identify improvements and express the case for station investment	<ul style="list-style-type: none"> • CCTV Provision • Help Point • Lighting Enhancements • Improved Wayfinding • Improved Information Provision • Station refresh • Improved Cycle Parking • Subway Improvements • TV Style Screens for Information 	West Yorkshire Combined Authority/ TOC	Rail Industry/Bidding Opportunities	0.5-0.75	Short-Term (0-5 years)	Gap	WYCA Station Development Plans

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Ref	Location (Where)	Scheme	Essential / Desirable	Need for scheme (Why)	Requirements of scheme / comments	Lead delivery agency/ management organisation	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding	Baseline source
					<ul style="list-style-type: none"> Urban Realm improvements Secure Car Park provision 						
TS9	Mirfield	Mirfield Railway Station	Desirable		<ul style="list-style-type: none"> CCTV Provision Help Point Lighting Enhancements Improved Wayfinding Improved Information Provision Heated Waiting Room Shelter Improved Cycle Parking Subway Improvements TV Style Screens for Information Small Car Park - Quick Implementation Urban Realm improvements Secure Car Park 	West Yorkshire Combined Authority/ TOC	Rail Industry/Bidding Opportunities	0.75-1.0	Short-Term (0-5 years)	Gap	WYCA Station Development Plans
TS10	District Wide	Improved Cycling and Walking Facilities	Essential/ Desirable	<p>A programme of core cycling and walking schemes in around Kirklees connecting to key employment and regeneration sites as per the walking and cycling network.</p> <p>Encouraging cycling and walking by improving facilities can save large amounts of money otherwise spent on the NHS and can reduce pollution and congestion.</p>	<ul style="list-style-type: none"> Huddersfield Town Centre and Connectivity – Phase 1 Huddersfield Town Centre and Connectivity – Future phases Huddersfield Narrow Canal Towpath – Phase 1 Huddersfield Narrow Canal – future phases Calder Valley Greenway: Bradley to Brighouse Dalton to Deighton Greenway Dewsbury Town Centre and Connectivity Shepley Bridge Marina, Mirfield to Spen Valley Greenway Spen Valley Greenway (East) extension (Calder & Hebble Canal - Dewsbury to Horbury) Spen Valley Sports College Link Spen Valley Ringway-south extension (High Street to Walkley Lane, Heckmondwike) Birstall to Batley A62 Leeds Road Cycle Super Highway A629 Halifax Road Birstall to Oakwell Fenay Greenway Holmfirth to Huddersfield Pennine Bridleway - Dark Peak Link 	Kirklees Council and in some instances HOTT or the Peak District National Park	LTP/ Bidding Opportunities/CIL	£50.0m+	Short term (0 - 5 years)	Gap	Discussion with Kirklees Officers

Appendix F - Infrastructure Delivery Programme - Transport

Ref	Location (Where)	Scheme	Essential / Desirable	Need for scheme (Why)	Requirements of scheme / comments	Lead delivery agency/ management organisation	Delivery mechanism	Cost	Delivery phasing (When)	Gaps in funding	Baseline source
TS11	Strategic Road Network (SRN)	Highways England has identified two schemes to be delivered in this Roads Investment period as required to accommodate the traffic growth on the strategic network as a result of Kirklees and neighbouring local planning authorities development growth aspirations. In addition there are two more schemes identified in Kirklees that will be required in the plan period, making 4 schemes in total		All schemes will improve links to other major centres in the North of England. The M62/M606 scheme in particular will provide for future housing and employment growth in the local area and improves connectivity to the M62 and in particular the M606 and Bradford. The M62 junction 27 scheme will compliment Kirklees' TS1 scheme, enhancing connectivity for existing and potential residents of Kirklees to Leeds, the Strategic Road Network and destinations beyond	junction or route improvements at the following locations: <ul style="list-style-type: none"> • M62/M606/A58/A638 (Chain Bar) • M62 Junctions 20-25 Smart Motorway • M62 Junction 24 (Northern dumb-bell and link to Ainley Top) • M62 Junction 27 (Southern dumb-bell) 	Highways England	Central Government Funding	Unknown	Short Term (0-5 years)	No Gap	Highways England: <ul style="list-style-type: none"> • Roads Investment Strategy 2015-2020 • M62 Route Strategy • West Yorkshire Infrastructure Study