Publication Core Strategy

Background Paper

Transport and Accessibility

www.rotherham.gov.uk/forwardplanning
1 Introduction

The purpose of this background paper is to provide some contextual background to the Core Strategy and the balanced transport provision in Policies CS14 to 18. Part I outlines the contextual evidence base that supports the policy approach. Part II considers the impact of growth proposed in the Core Strategy on the highways network, including the preliminary results of a Transport Infrastructure Delivery Study within Rotherham.

PART I – CONTEXTUAL EVIDENCE BASE

2 A brief recent history of Rotherham’s transport policies

The policy of balanced transport provision in Rotherham dates back to 2001 when the Borough adopted the first 5 year South Yorkshire Joint Local Transport Plan (LTP) (2001-06) – the first plan to set out and fund a comprehensive and integrated transport policy across the whole of South Yorkshire.

The LTP process was introduced against the backdrop of rapidly rising traffic figures, increasing awareness of the effect of carbon emissions and a general consensus that growth in travel (and car travel particularly) had to be managed. LTP’s also directed local authorities away from the ‘predict and provide’ approach (i.e. accommodating traffic growth with more new roads) towards reducing the need to travel and improving choice and awareness of more sustainable modes such as public transport, cycling, walking and car sharing.

In Rotherham, the first LTP introduced bus priority measures, cycling routes, walking improvements alongside the traffic management, road safety projects and highways improvements. Local Transport Plans were seen as a success and their benefit to integrated transport planning and funding is widely accepted. Since 2001, two further plans have been produced with the current plan being the 3rd South Yorkshire Joint Local Transport Plan 2011-15.

The benefits of wider regional transport planning across South Yorkshire have been further reinforced by the Sheffield City Region Transport Strategy. This document sets out a high level strategy for Transport across the Sheffield City Region ensuring that transport connections are improved both within the City Region and to other City Regions beyond its boundary such as Manchester Leeds and London. The combined effect of the Sheffield City Region Strategy and the Local Transport Plan (2011-15) is effectively this:

- Support the economic growth of the Sheffield City Region
- Enhance social inclusion and health.
- Reduce the emissions from vehicles
- Make transport and Roads increasingly safe and secure

Development of the Core Strategy has had to regard a number of key policy documents, and in doing so takes forward the key aims of the Sheffield City Region...
Transport Strategy, the Local Transport Plan and documentation arising from those over arching Policies including:

- South Yorkshire Network Management and Congestion Delivery Plan
- Safer Roads Action Plan
- Climate Change and Air Quality Action Plan
- South Yorkshire Cycling Strategy Local Transport Plan 2011-26
- Corporate and Community Plan
- Sustainable School Travel Policy
- Highways Asset Management Plan
- Transport Asset Management Plan
- South Yorkshire Park and Ride Strategy
- Regional and SY Freight Strategy
- Yorkshire and Humberside Rail Network Utilisation Strategy
- SY Rail Strategy
- National Planning Policy Framework March 2012

3 Profile of travel in Rotherham

Strategic routes

The strategic road network relating to Rotherham is shown in Map 9 of the Core Strategy, and is characterised by the following:

Rotherham has a central location on the national motorway network. The M1 and M18 are within its boundaries and there is easy access to the A1 (M), and M180. Trans Pennine road links are provided by the A57 Snake Pass and the A616 / A628 Woodhead Pass. However, its central location also means that Rotherham is exposed to congestion and emissions caused by longer distance or non-local through traffic. Locations particularly prone to congestion are on the M1 between junctions 31-32, 34-35 and 35a-36. Motorways account for some 40% of Rotherham’s transport CO2 emissions.

The strategic road network within the Borough is generally mature and comprehensive with a network of mainly radial A and B roads connecting the centre of the Borough with neighbouring areas. Any need for new strategic links is focused in areas of redevelopment and regeneration.

Travel to work

Census statistic from 2001 demonstrated Rotherham’s proportion of work-related trips by sustainable and less sustainable travel modes. The Borough had the highest proportion of residents travelling by car and a correspondingly low use of cycling and walking for work related trips. This is in part due to Rotherham being a net exporter of employment trips with more workers leaving the borough than entering it to work each day.
Travel to school

There are 122 schools in Rotherham all of which have a School Travel Plan. There are excellent opportunities for school travel by sustainable means however concerns over road safety can put many families off making even short trips on foot or by cycle. Nevertheless, the combined total for car use for trips to schools is below the national average. Walking trips are above the national average but cycling is well below.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Barnsley</th>
<th>Doncaster</th>
<th>Rotherham</th>
<th>Sheffield</th>
</tr>
</thead>
<tbody>
<tr>
<td>Car as driver</td>
<td>60.9%</td>
<td>58.6%</td>
<td>62.6%</td>
<td>52.4%</td>
</tr>
<tr>
<td>Car as passenger</td>
<td>9.1%</td>
<td>8.4%</td>
<td>8.1%</td>
<td>6.5%</td>
</tr>
<tr>
<td>Rail</td>
<td>1.1%</td>
<td>1.4%</td>
<td>0.4%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Light rail</td>
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<td>0.0%</td>
<td>0.4%</td>
<td>2.8%</td>
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<tr>
<td>Bus</td>
<td>8.1%</td>
<td>10.2%</td>
<td>11.3%</td>
<td>17.8%</td>
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<tr>
<td>Motorcycle</td>
<td>0.4%</td>
<td>0.4%</td>
<td>0.3%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Cycle</td>
<td>0.8%</td>
<td>2.8%</td>
<td>0.8%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Walk</td>
<td>10.9%</td>
<td>9.3%</td>
<td>7.3%</td>
<td>10.4%</td>
</tr>
<tr>
<td>Work from home</td>
<td>7.3%</td>
<td>7.7%</td>
<td>7.2%</td>
<td>7.0%</td>
</tr>
<tr>
<td>Other</td>
<td>1.4%</td>
<td>2.0%</td>
<td>1.1%</td>
<td>1.4%</td>
</tr>
</tbody>
</table>

% of Mode of Travel

<table>
<thead>
<tr>
<th></th>
<th>OTHER BUS</th>
<th>CAR</th>
<th>CAR SHARE</th>
<th>CYCLE</th>
<th>SCHOOL BUS</th>
<th>METRO/TRA</th>
<th>OTHER</th>
<th>PUBLIC BUS</th>
<th>TRAIN</th>
<th>TAXI</th>
<th>WALK</th>
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</thead>
<tbody>
<tr>
<td>BNK</td>
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<td>41.2%</td>
<td>0.3%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.3%</td>
<td>57.8%</td>
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<td>0.3%</td>
<td>33.5%</td>
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<td>0.1%</td>
<td>0.6%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.6%</td>
<td>61.7%</td>
</tr>
<tr>
<td>2.2%</td>
<td>15.1%</td>
<td>2.7%</td>
<td>0.8%</td>
<td>9.5%</td>
<td>0.0%</td>
<td>1.6%</td>
<td>11.4%</td>
<td>0.1%</td>
<td>0.4%</td>
<td>56.1%</td>
<td></td>
</tr>
<tr>
<td>7.0%</td>
<td>12.7%</td>
<td>1.9%</td>
<td>0.1%</td>
<td>23.6%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>3.3%</td>
<td>1.1%</td>
<td>0.1%</td>
<td>50.2%</td>
<td></td>
</tr>
<tr>
<td>0.0%</td>
<td>6.8%</td>
<td>0.2%</td>
<td>0.0%</td>
<td>63.4%</td>
<td>0.0%</td>
<td>0.4%</td>
<td>0.4%</td>
<td>0.0%</td>
<td>24.3%</td>
<td>4.6%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Nursery - pink</th>
<th>Primary - blue</th>
<th>Secondary - green</th>
<th>Academy - orange</th>
<th>Special schools - yellow</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.6%</td>
<td>24.7%</td>
<td>2.6%</td>
<td>0.3%</td>
<td>6.8%</td>
<td>0.0%</td>
</tr>
<tr>
<td>1.0%</td>
<td>26.1%</td>
<td>2.6%</td>
<td>0.4%</td>
<td>4.9%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Source: 2011 School Census
Encouraging school modal split data tends to exonerate the Council’s approach towards sustainable travel in schools. Projects such as Walk to School Week, Bikeability Training, Road Safety Education and Bike It are clearly having a positive effect on Rotherham’s schools.

In terms of tackling obesity, latest results published in December 2011 relating to the 2010/11 school year continue to demonstrate a year on year increase in coverage across both reception and year 6 performing better than the all England average. Results are following the national trend in relation to reducing reception year obesity reducing from 10.5% to 8.3% (a reduction of 1.8% compared to an all England reduction of 0.4%). However obesity in year 6 continues to rise more steeply rising by 1.4% (from 20.2% to 21.6%) compared to a national rise of 0.3%.

To improve choice, encourage better use of non-car travel modes and to address safety and environment concerns, the core strategy includes a number of ‘sustainable’ travel policies.

### 4 Rail

Much of the operation and management of the rail network is beyond the scope of the LDF - the passenger rail network in Rotherham is operated by Northern Rail, although some services are supported by the SYPTE. Track and infrastructure are operated by Network Rail who have outlined limited improvements for future improvements to local infrastructure and rolling stock in the Yorkshire and Humber Rail Network Route Utilisation Strategy.

Much of the future development of the rail network is pre-determined, our aim is to continue to promote improved rail services through Rotherham Central Station with particular emphasis on improving our connectivity with the Sheffield, Manchester and Leeds City Regions and promoting better access to the inter regional train services passing through those major centres. The Council also supports any localised improvements to the rail network contained in the South Yorkshire Rail Strategy which

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**Mode of transport to school, Great Britain, 2002 to 2006**

<table>
<thead>
<tr>
<th>Mode of Transport</th>
<th>2002-2006 Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Train, underground, light rail or tram</td>
<td>0.6%</td>
</tr>
<tr>
<td>Public bus, minibus or coach</td>
<td>7.8%</td>
</tr>
<tr>
<td>School or LA bus, minibus or coach</td>
<td>7.9%</td>
</tr>
<tr>
<td>Motorcycle, scooter or moped</td>
<td>0.1%</td>
</tr>
<tr>
<td>Car or van</td>
<td>33.1%</td>
</tr>
<tr>
<td>Taxi/minicab</td>
<td>1.2%</td>
</tr>
<tr>
<td>Bicycle</td>
<td>1.8%</td>
</tr>
<tr>
<td>On foot</td>
<td>47.0%</td>
</tr>
</tbody>
</table>

includes improvements to platform waiting areas, ticketing and information and extensions to park and ride facilities.

New rail tracks are unlikely to be delivered in the lifetime of the LDF, there are numerous disused former railway lines in the Borough that may have a future transport use for either rail, walking or cycling. These routes offer ideal terrain for walking and cycling routes (reasonable gradients, direct and traffic free and it will be prudent to safeguard these routes for the foreseeable future. Therefore, in the main, the Council’s key role will be limited to safeguarding former rail routes for use by other travel modes and any required for rail infrastructure improvements.

5. Freight

A move toward a sustainable freight distribution network is a key aim but, for the short to medium term, we have examined current commercial and retail practices and we do not expect to be able to influence any material changes to the way freight is moved. It is likely that freight will continue to be moved as follows:

- The movement of ‘bulk’ loose goods and longer distance hauls will remain a key function of the rail and canal network, particularly between Rotherham and the Humber ports.
- The movement of non-bulk freight will be mainly road-based and concentrated on the key route network.

The Yorkshire and Humberside Regional Freight Strategy (RFS) provides a framework for developing a sustainable regional freight distribution strategy. The framework has been used to develop a sub regional freight strategy which will address freight issues in Rotherham and South Yorkshire.

PART II – IMPLICATIONS OF GROWTH ON THE TRANSPORT NETWORKS

6. Growth in Rotherham

The Core Strategy transport policies aim to limit transport growth by promoting walking, cycling and public transport use. Better land (and transport) planning will also reduce the need to travel so that overall transport growth can be managed. However, housing and employment growth does have implications for the transport network and the Council have adopted a strategic approach to manage it.

The implications of growth have been assessed in three main ways: consideration by the Highways Agency of the impact on the strategic Road Network, an assessment by the South Yorkshire Passenger Transport Executive (SYPTE) having regard to the ambitions of the Sheffield City Region Transport Strategy and the principles of the South Yorkshire Land Use and Transport Integration (LUTI) project, and a
consideration of the infrastructure and mitigation requirements arising from proposed development.

**Strategic Road Network**
The implications for growth on the Strategic Road Network have been considered by the Highways Agency, utilising their Network Analysis Tool. Appendix 1 contains the detailed output of this analysis. Two assessments have been carried out; firstly an assessment based on the levels of growth and distribution arising from a housing target in line with the Regional Strategy, and secondly an assessment based on the locally derived housing target and distribution as set out in the Publication Core Strategy.

In each assessment the first four slides show the base data for 2007, the second batch of four slides show purely the development trips generated by the development sites that are included in the run, and the final group of four slides show the combined output of the base and development trips taking into account TEMPRO (a program that provides projections of growth over time).

The difference between the two outputs (in terms of where there is impact) is not dissimilar; instead the Regional Strategy trajectory simply has a greater number of flows per link over the network. This is the case on both the M1 and the M18. The differences are not great enough to cause a percentage change in stress in the Regional Strategy trajectory compared with the Core Strategy run. The greatest impact is seen northbound on the M1 with junction 35 having the greatest increase in movements. Likewise, in the PM peak, junction 35 is also seeing the highest increase in trips; and Junction 33 of the M1 has also a significant increase in trips.

The overall conclusion by the Highways Agency is that the Publication Core Strategy growth targets have less projected impact than the higher Regional Strategy targets, and that they have no in principle concerns about the level of development proposed. They indicate that in relation to the Sites and Policies DPD that the site-by-site information includes details of any necessary mitigation which might be required to make a particular site deliverable.

**SYPTTE Assessment**
SYPTTE considered how the proposals in the Publication Core Strategy link with the ambitions of the Sheffield City Region Transport Strategy and the principles of the South Yorkshire Land Use and Transport Integration (LUTI) project. Their findings are set out at appendix 2. With regard to housing the SYPTTE noted that most of the planned growth areas are already supported by the core public transport network. However, the large growth areas such as Waverley, Bassingthorpe Farm and Dinnington would require further investigation.

In principle, the locations of growth are fully supported by Policy I of the SCR Transport Strategy (focusing new development along key public transport corridors), although large sites such Bassingthorpe Farm, Dinnington and Waverely will need new infrastructure to support its growth (mainly due increased travel demand). As the location of growth is broadly supported by public transport, SYPTTE are not strongly opposed to the changed numbers of housing between the Regional Strategy and LDF
proposals. The assessment does however make a number of suggestions as set out in appendix 2.

Considering planned employment growth the SYPTTE note that, with the exception of Aston, Aughton and Swallownest the majority of the growth will be either contained within the catchment of the existing network or fall within the catchment of planned schemes.

**Local Road Network**
To assess the impact of growth the Council is working with Sheffield City Council making full use of the Sheffield and Rotherham Strategic Transport Model. The Transport Team at Rotherham Borough Council and South Yorkshire Passenger Transport Executive were asked to consider the impact of the growth on the existing infrastructure and the costs of any mitigation measures required. The deliberations were informed by the detailed transport modelling work carried out using the Sheffield and Rotherham Transport model version 3 (SRTM3). This model was used to support the successful application to the Department for Transport (DfT) for funding towards a bus rapid transit system between Rotherham and Sheffield via the Lower Don Valley.

The base year for SRTM3 is 2008 and forecasts of conditions on the transport system in the area were produced for 2015 and 2030. The model covers the highway, bus and rail network in the area and separate forecasts are available by time of day. The growth factors for person travel were taken from the DfT forecasts contained in Tempro. These growth factors allow for an increase in the number of households and jobs in the area. The growth factors for goods vehicles were taken from the DfT’s National Transport Model Road Traffic Forecasts for England revision 1.1 March 2010. SRTM has been developed using Saturn computer software. The Model is multi-modal, and assesses the impact of development and changes to the movement networks for morning and afternoon peak periods. The Model has been fully validated, and complies with Department for Transport guidelines.

The outcomes from the modelling work are contained within the Rotherham Metropolitan Borough Council Infrastructure Delivery Study Report, March 2012.

The Council has also had regard to Circular 2/07: Planning and the Strategic Road Network. This sets out the need for local planning authorities to fully involve the Highways Agency (HA) in developing their LDF proposals, having regard to the often limited capacity of the SRN and any additional pressure that may arise from residual trips. In response to the Circular, the HA have produced a guidance note on preparing an Evaluation of Transport Impacts. This states that it is for the individual authority to decide the most appropriate way of evaluating transport impacts in their area, but encourages the use of regional, sub-regional and local transport models, where available and appropriate. Ideally this should be multi-modal, and able to assess mode transfer and differing demand scenarios, alongside the impact of mitigation measures involving public transport upgrades.

The views of the Highway Agency and the impact on the SRN have been taken into account when determining which housing and employment allocations are favoured in the Core Strategy.
7. Mitigation

Our modelling work indicates that the most significant transport congestion is experienced in central Rotherham. If each individual site is looked at in isolation, then additional congestion could be tolerated on these sites. However, this view of individual site impacts can fail to capture the cumulative impacts of growth on strategic transport infrastructure. The delivery of the growth aspirations for specific parts of the Borough is likely to require an area wide package of transport improvements to address the cumulative impact of the growth. This has been taken into consideration when articulating future requirements stemming from growth and proposals are set out in the Rotherham Metropolitan Borough Council Infrastructure Delivery Study Report, March 2012. A brief summary of that report is set out below.

Site 1 Bassingthorpe Farm

A small amount of housing could be provided from local access onto frontage along Barbot Hill Road, Munsbrough lane and Fenton Road. However further housing numbers will require an access road to serve the site. It is recognised that this road will be critical to the delivery of the overall scheme and further work will be undertaken as planning for Bassingthorpe Farm is refined to assess actual road infrastructure design and costs. We expect this will be expensive, and will need to be provided by the developer. Discussion on this involving the Borough Council’s Highway Team and the developer have commenced and will continue to identify a solution towards the mid part of the plan period when the scheme is expected to come forward. Details will be incorporated into the infrastructure delivery schedule as they come forward.

The new development at Bassingthorpe Farm will also increase the congestion currently experienced on routes into Rotherham town centre from the north and within the town centre. The existing problems in the town centre, which are particularly significant in the north are expensive to solve using traditional means because of constraints caused by the railway lines so the preferred approach would be to manage traffic using around ten variable message signs which cost in the region of £50,000 each.

In the medium term it will be necessary to signalise Taylor’s Lane roundabout which will cost around £1.2m. A bid to the Local Sustainable Transport Fund (LSTF) includes an allocation towards the costs associated with the signalisation of Taylor’s Lane Roundabout. An announcement on the outcome of the bid will be made in summer 2012.

The A629 Fenton Road Roundabout will also need improvement. This is likely to be a scheme to signalise the roundabout at a cost of £1.2m. A cross-district service that serves Sheffield – Rotherham – Doncaster operates along the A629 which is classified as a key bus route and improvements may be needed along the route to provide for measures to maintain bus journey times.

It needs to be acknowledged that Bassingthorpe Farm is also likely to have an impact on the junctions identified in site 2 below.
Site 2 Rest of Rotherham urban area

The results of the model runs from SRTM3 have been reviewed. These show the junctions in town centre which will be congested in the future. The worse affected junctions are in the north and west of Rotherham town centre. Additional housing in Rotherham urban area would add to the current congestion predominantly on the inner ring road and at other junctions in the town centre particularly the St Anns, College Road, Pool Green, Ickles Roundabouts on A630 Centenary Way as well as some impact on the junctions on the southern section of the inner ring road. The College Road, Poole Green and Ickles roundabouts would be used by traffic going to the M1. Measures to manage the growth in traffic at the 4 roundabouts on Centenary Way will need to be introduced at an estimated cost of £8-9m, which would include the Poole Green roundabout which could be improved with signalisation, costing around £5m.

It is expected that if there is to be increased employment in the site adjacent to the Parkgate retail area, and then another access will be required, which would most likely have to be provided over the railway line. This would cost at least £5m and would be 100% due to the development. With new developments off A631 East Bawtry Road, then there would be a need to increase the capacity of the Worrygoose Roundabout but no appropriate scheme has been drawn or costed. A provisional estimate of £1m suggested.

Site 3 Dinnington, Anston & Laughton Common

This site is to the south east of Rotherham and much of the traffic from new developments would use the A57. Funding has been secured for a £14.7m scheme to improve the link between the A57 and the M1. The A57 improvement widens the existing single carriageway to a dual two lane carriageway between the termination of the existing dual carriageway of Worksop Road-Sheffield Road 400m east of the M1 Junction 31 to the junction of the A57 and the B6463 Todwick Road. The junction of the A57 and the B6463, currently a signalised crossroads, will be replaced by a five arm roundabout. A public inquiry for the compulsory purchase orders (CPO) is now completed and as CPOs have been granted the work should begin late summer 2012.

In addition, growth in this area could require local improvements to the junctions at Anston (A57/B6060) and the Dinnington roundabout. The changes to the Anston crossroads are estimated to cost about £1.2m. The Dinnington Roundabout at the junction of the B6060/B6463 may require signalisation costing £750k.

Site 4 Wath, Brampton, & West Melton

There would be no significant traffic issues associated with new development here as a new highway has recently been provided. There would be a need for very localised junction improvements on A633 to provide access to the development sites but the carriageway is 10m wide so there is scope to enlarge junctions and increase link capacity if required. There may be a need to signalise the A6195/A633 roundabout improvement if there was to be any additional growth. This junction is in a neighbouring authority which raises cross-border issues. The changes are estimated
to cost about £750,000. New development in this area would increase traffic flows on routes into Rotherham via the A633 and B6089 and this may require minor improvements to junctions though the LDF does not propose any new growth here.

Site 5 Swinton & Klinhurst

Development here would require improvements to the A6023/A633 Woodman roundabout with estimated costs of £500k and at the A633/Kilnhurst Road junction costing £500k.

Site 6 Bramley, Wickersley & Ravenfield

New development here would require junction improvements at the Masons roundabout A631/B6060 including signalisation which would cost around £1m.

Site 7 Maltby & Hellaby

Development in this area will benefit from the Highways Agency improvement to Junction 1 of the M18. There would be a need for an additional westbound lane from Addison Road towards M18, which could be a bus lane/HOV lane. This is estimated to cost £1.5m.

Site 8 Aston Aughton & Swallownest

Depending on the amount of development it might be necessary to improve the A618 approach to the A631/A618 Whiston crossroads costing £0.5m. With a large amount of new development it may also become necessary to signalise M1 junction 31 to avoid queuing on the motorway.

Site 9 Wales & Kiveton Park

The A57 improvement scheme, removes the constraint to future development currently posed by this junction. The CPO/SRO inquiry was completed in late 2011, the necessary legal orders have been granted and construction is planned to start in late 2012.

Around 300 houses could be accommodated by the A57 improvement scheme with possible minor improvements needed to Kiveton Lane such as widening to a two lane approach. This would cost £400,000.

Site 10 Thurcroft

A contribution would be required to an improvement at the Masons Roundabout improvement as there is currently congestion on Morthen Road and would cost around £1m.

Site 11 Thorpe Hesley

Two junction improvements on the A629 (Brook Hill/London Way) would be required; costing £850,000, but this is mainly due to the pressure from existing congestion.
Site 12 Waverley New Community

The junction improvements required as a result of the committed development are secured through S106 agreements attached to the Waverley AMP Waverley New Community and Helical Governetz Developments, with improvements to the junction of A630 Sheffield Parkway and B6533 Poplar Way and Europa Link (Catcliffe Dumbell Roundabout) already completed.

In addition the Waverley New Community and Helical Governetz planning consents secure a 10% contribution from the developer towards the proposed Waverley Link Road major scheme. However, it should be noted that the developments are not constrained should the WLR scheme not be implemented. DfT funding is currently being sought for the Waverley Link Road scheme.

Site 13 Catcliffe, Treeton and Orgeave

There are no significant issues in this area.

Buses requirements and costs

The most sustainable locations for new housing and employment developments are areas that are already served by high frequency bus services. Many of the popular bus routes in the Borough run along roads that are also well used by cars and experience congestion. SYPTE in conjunction with RMBC have a program of key bus routes and are seeking to provide bus priority measures along these routes to protect and improve bus journey times. Some of the cost of these routes could be considered as attributable to new development as traffic from the developments will be exacerbating the highway congestion along these routes.

Key Route Bus - Rotherham Central Core including Thrybergh - £3.5m

This scheme provides bus priority measures, improved bus stop infrastructure and tackles congestions on the Rotherham Central core Key Route. This is the top priority scheme and is already partially funded. £1.2m has been spent on Mushroom Roundabout from local transport plan funding, a further £600k has been spent widening the Fitzwilliam Road approach to St Anns Roundabout, the proposal to upgrade existing crossings and install a new pedestrian crossing along the corridor is anticipated to cost £450k from local transport plan funding. The proposed signalisation of the A630 Doncaster Road at its junction with Oldgate Lane will cost £600k from Local Transport Plan funding and a westbound bus lane from Whinney hill to Oldgate lane is estimated at £600k with funding sought from the DfT’s Better Bus Fund.

The Mushroom roundabout signalisation was completed in summer 2011. Other hotspots that need remedial measures include Oldgate Lane, Whinney Hill and Fitzwilliam Road.

Key Route Bus - Rotherham to Maltby - £1.5m
This scheme provides bus priority measures, improved bus stop infrastructure and tackles congestion on the Maltby corridor particularly on Addison Road.

**Key Route Bus - Rotherham to Swallownest -£850,000**

This route is the main link between Rotherham and the residential areas of Aughton, Swallownest and Aston. The scheme aims to reduce highway congestion along the route.

**Key Route Bus - Rotherham to Chapeltown-£1.5m**

The project aims to provide bus priority measures and infrastructure improvements on A629 Rotherham-Chapeltown route within the Rotherham borough boundary.

**Key Bus Route – Rotherham to the Dearne £2.0m**

The recent bid to the DfT local Sustainable Transport Fund includes a bid for £1.4m for works to signalise the Taylors Lane roundabout, which will improved bus priority at this key roundabout which is currently a pinch-point on the route An announcement on the success or otherwise of this bid is due in June 2012.

**Bus Rapid Transit**

The bus rapid transit route along the Lower Don Valley from the centre of Rotherham to the centre of Sheffield has been awarded grant funding from the DfT. The BRT (N) scheme will introduce a high frequency, limited stopping bus service between Rotherham and Sheffield Centres, via the Lower Don Valley. A key element of the scheme is the bus priority measures that will be provided to maintain JT reliability, including a new highway link which joins Sheffield Road and Meadowhall Way that goes under the Tinsley Viaduct and bypasses congestion at J34N and J34S.

**Cycling infrastructure requirements and costs**

A current bid to the Local Sustainable Transport Fund includes three walking and cycling schemes:

- **Lower Don Valley Cycle Route £ 1.8m.** This is a 13.25Km of cycle scheme between Sheffield and Rotherham mainly a segregated off road route along the current canal tow path.

- **Rawmarsh to Rotherham Town Centre Cycle Route, £1.1m.** This is a 3.1km route to improve linkages between Rawmarsh and Rotherham Town Centre and will be mainly unsegregated on-road route.

- **Dearne Valley to Swinton Cycle Route, £320k.** This is a 1.2 km of cycle infrastructure will route, mainly off road which will improve linkages between Swinton and Dearne Valley College.

These schemes are designed to serve the needs of the existing communities but would help to promote the use of sustainable transport from new developments along
these routes. There will also be the need for individual stand alone and route based walking and cycling improvements such as the recently completed accessibility improvements along Doncaster Road East Dene which cost £1.3m over 3 years.

**When is the infrastructure likely to be needed?**

It is difficult to provide firm guidance about when infrastructure is required because there are no local or national guidelines about what level of transport congestion is considered acceptable and there is uncertainty about the rate of background traffic growth and actual delivery of planned growth. Given the above uncertainties, in preparing the Infrastructure Delivery Study professional judgement has been used to judge when road infrastructure begins to represent a barrier to build-out of the individual growth sites. Further detail is provided in the Study which is available from the Council’s website: www.rotherham.gov.uk/forwardplanning

For more information you can contact Forward Planning by the following means:

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Appendix 1

Highways Agency Assessment: Network Assessment Tool Results
Network Analysis Tool
Rotherham RSS Trajectory Results

March 2012
Base Year, 2007, AM Peak
Base Year, 2007, PM Peak
Base Year, 2007, AM Peak
Base Year, 2007, PM Peak
Development Flows, 2027, PM Peak

Vehicle Flows in PM Peak, Development Flows (2027)
Development Flows, 2027, AM Peak
Development Flows, 2027, PM Peak
Development Forecast Flows, 2027, AM Peak
Development Forecast Flows, 2027, PM Peak
Development Forecast Flows, 2027, AM Peak
Development Forecast Flows, 2027, PM Peak
Base Year, 2007, AM Peak

Vehicle Flows in AM Peak, Base (2007)
Base Year, 2007, PM Peak
Base Year, 2007, AM Peak

Vehicle Flows in AM Peak, Base (2007)
Base Year, 2007, PM Peak
Development Flows, 2027, AM Peak

Vehicle Flows in AM Peak, Development Flows (2027)
Development Flows, 2027, PM Peak
Development Flows, 2027, AM Peak
Development Flows, 2027, PM Peak
Development Forecast Flows, 2027, AM Peak
Development Forecast Flows, 2027, PM Peak

Vehicle Flows in PM Peak, Dev Forecast Const. (2027)
Development Forecast Flows, 2027, PM Peak
Appendix 2

SYLTE assessment
RMBC Internal Consultation – LDF Growth Scenario and Strategic Transport Assessment

Introduction

SYPTÉ have been asked by RMBC Forward Planning Department to investigate the possible implications of various growth scenarios related to housing and employment distribution within the borough. SYPTÉ have been tasked with identifying how these proposals link with the ambitions of the Sheffield City Region Transport Strategy and the principles of the South Yorkshire Land Use and Transport Integration (LUTI) project.

The analysis presented in this report broadly duplicates SYPTÉ’s response to the RMBC LDF Core Strategy and Site Allocations DPD public consultation late last year, however, a stronger emphasis will be put on the future growth and how planned major public transport schemes will help provide the necessary accompaniment to help meet the infrastructure requirements.

It must be noted that although LUTI highlights areas of good public transport accessibility, it doesn't assess the impact on the highway of more public transport trips. It is therefore essential that the outcomes of the LUTI assessments will need to be considered and examined alongside the outcomes of Highway Agency findings.
Growth Distribution – Housing

Figure 1 shows the distribution of housing growth throughout the borough overlaid with the core public transport network. It can be seen that most of planned growth areas are already supported by the core public transport network. However, the large growth areas such as Waverley, Bassingthorpe Farm and Dinnington would require further investigation.

Figure 1: Housing Growth Distribution

In principle, the locations of growth are fully supported by Policy I of the SCR Transport Strategy (focusing new development along key public transport corridors), although large sites such Bassingthorpe Farm, Dinnington and Waverley will need new infrastructure to support its growth (mainly due increased travel demand). As the location of growth is broadly supporting by public transport, SYPTTE are not strongly opposed to the changed numbers of housing between the RSS and LDF proposals. However, if the housing target is to be decreased, SYPTTE have the following suggestions;

1. **Maintain the main growth areas in areas with high accessibility** – the growth of the housing numbers must be maintained in the areas where access to public transport is high (i.e on LUTI green and amber sites). If housing numbers are to be decreased, SYPTTE request that quickly and easily deliverable sites with existing public transport should be developed first, therefore reducing the need for public transport intervention.
2. **Large site project integration** - On the large sites such as Bassingthorpe Farm and Dinnington, involving SYTPE early in the masterplanning stage will help to integrate appropriate transport solutions into the planning proposals and planning conditions (either S106 or CIL). Early identification of schemes will provide more certainty about the delivery accessibility to sustainable forms of transport and ensuring large scale growth is achieved sustainably.

3. **Limit distribution** – The changed figures represent a reduction in housing figures in each community rather than the focusing and maintaining housing numbers in areas that already have access to public transport and a range of existing community facilities. For example, the LDF figures show that there will be no future housing allocations in Wath upon Dearne. It may be more efficient to maintain the growth in areas which already benefit from high levels of public transport (and other public) infrastructure, displacing the housing figures from less accessible areas of the borough. For example, The proposal is to half the RSS figure for Dinnington in the LDF – We feel that high density growth will be better supported in one location so that the a critical mass of demand results, making the provision of associated services more viable.

4. **High density** – Although the maps are quite strategic and do not identify the densities in each area, SYTPE recommend that sites close to the existing core public transport are of a higher density than the borough average. This will ensure that more users are close to the network and will have the option to travel by sustainable modes of transport.

5. **Policy shift towards green sites** – The reduction of the housing numbers should provide a strong policy shift towards LUTI green and Amber sites. The reduction in housing figures should be focused on the removal of red/inaccessible sites in the first instance. The development of red sites works if the sites are large or in clusters of a collective number that would make schemes or new transport services viable in the long term. If a small or medium sized red site is developed in isolation (1 – 350 houses), the chance of public transport intervention is limited and the long impact will be an inaccessible site. However, if the site was to be developed along with another red site of the same size, then the critical will be present to make an intervention more viable. Reducing the housing figures could promote the former, therefore SYTPE recommend the removal of small to medium red sites in the first instance (if the LDF figures are to be applied).

6. **Bassingthorpe Farm** - The RSS and LDF figures do not show any difference between the intended growth at Bassingthorpe Farm. This is full supported by SYTPE as sites of this size and strategic importance will provide the housing numbers to require public transport intervention, any reduction of the housing requirement on this site will impact on the feasibility of a transport scheme to unlock the site. SYTPE are currently investigating the transport infrastructure requirements for this site/area.

7. **Rotherham Urban Area** – This area contains the most accessible areas within the borough. The LDF figures have substantially reduced compared to the RSS figures. In line with point 3, SYTPE would recommend that growth on green sites in this area is maintain, therefore limited the burden on other less accessible areas of the borough.
8. **Dinnington** – Dinnington is an area that is currently provided with a good level of public transport. In light of this and given its locational importance, SYPTE would welcome the higher level of growth as outlined in the RSS. If RMBC is to continue with the LDF growth figures, SYPTE recommend that RMBC consider keeping the RSS figures in this area with the difference being made up from other areas of the borough.

9. **Brampton, Wath and West Melton** – The LDF proposed growth figure provide no future growth in Brampton, Wath and West Melton. SYPTE recommend that RMBC reconsider this as the area has excellent access to public transport and a range of services. Failing to build on the existing infrastructure is not making best use of existing resources, especially as the area has the potential to accommodate a significant amount of growth in a sustainable way.

10. **Thorpe Hesley** – Public transport access in this area is currently limited. While all the other areas of Rotherham have seen a dramatic decreased allocation from the RSS to LDF numbers, the area has seen a very limited reduction in housing numbers despite its poor access to public transport. SYPTE would recommend that this area should be considered to see the least amount of growth.

11. **Waverley** – The housing figures show that the existing dwellings on Waverley are 2,500 not the 3,800 which has preceded consent. Through input into Masterplanning, there are established S106 obligations concerning the delivery of sustainable transport solutions at the site.
Growth Distribution – Employment

Figure 2 below shows the distribution of employment sites within the borough in relation to the core public transport network. As can be seen, with the exception of Aston, Aughton and Swallownest the majority of the growth will be either contained within the catchment of the existing network or fall within the catchment of the planned schemes.

Figure 2: Employment Growth Distribution

1. **Aldwake** – The area has been highlighted to accommodate the most significant growth in the borough. Due to the size of the development, there are large areas of the allocated sites that have no access to public transport. The site to the north east of the existing Parkgate shopping centre has been outlined as a major growth area which will unlock a large amount of employment land and as a result generate a lot of trips. It is SYPTE’s intention to build a tram/train extension to this area to support this growth and ensure that some of the trip generation is placed on public transport.

2. **Waverley AMP and Enterprise Zone** – SYPTE are aware of the desired growth in this area. It is essential that in order to unlock this site in relation to public transport, the large scale infrastructure that has been secured through the existing S106 is maintained. The growth of this area will help ensure that the current public transport operations are in kept in the long term. Access to this area is key to the effectiveness of the enterprise zone and its long term viability as a business location.
3. **Wath, Brampton and West Melton** – SYPTÉ welcome growth in this area as it has excellent transport links, connecting Sheffield, Barnsley and Rotherham by both train and bus services. This area of the Dearne Valley already attracts major employers and building on this existing enterprise will help ensure that bus operations (currently secured through S106) remain viable and built upon.

4. **Aston, Aughton and Swallonest** – This area is currently disconnected from the core public transport network and would be of a concern to SYPTÉ if significant was to occur. Without intervention, the developments of this area would be car dependant as an attractive public transport option not available. Services to Aston have the potential to be modified, however discussion with operators needs to be considered. Also, the cross boundary implication needs to be considered.

5. **Dinnington, Anston and Laughton Common** - Dinnington currently benefits from a good level of public transport accessibility. In light of this, SYPTÉ welcome employment growth in the area as it will help ensure the Dinnington area can provide local jobs in line with its anticipated housing growth.