- Planned Supertram schemes, such as track replacement and tram units, will improve the network and increase capacity. The current Tram-Train project will improve connections to Rotherham, and further extension of this concept could benefit other Urban Centres, such as Barnsley, unlocking access to housing sites and employment opportunities.

- The tram network presents an opportunity to focus development around current and future mass transit lines. The Tram-Train Trial will improve access throughout the Rotherham-Sheffield corridor and to Sheffield City Centre. There is scope to extend the tram network to serve the Innovation District and to build patronage through incremental infrastructure delivery.

### 2.3.6.6 Freight

#### Freight Challenges

- Increasing road freight movements contribute to congestion and air quality issues in Urban Centres. Logistics is identified as a key growth sector, specifically at Markham Vale, The Dearne Valley and Doncaster Sheffield Airport / Doncaster iPort. There is a need to establish the infrastructure required to support the logistics sector and achieve the SEP growth target in this sector. The strategic road and rail networks carry significant amounts of freight with a range of specialist loads associated with manufacturing and high volumes associated with the large number of logistics and distribution hubs in SCR. These movements often have time critical schedules.

- Poor quality of Trans-Pennine road links limits the opportunity for freight movement.

- Delays on the national road network result in unreliable journey times and delay for freight operators, meaning loss productivity and presenting a constraint to the emergence of Industry 4.0.

- Gauge restrictions and conflict with passenger services present a constraint to growth of rail freight.

- Access to the Humber and Liverpool ports by road and rail from SCR is constrained.

#### Freight Opportunities

- The use of consolidation centres offers the opportunity to reduce road freight movements in Urban Centres, and increase the efficiency of the logistics sector. SCR has a growing logistics sector; Doncaster, The Dearne and Markham Vale are at the heart of this with well established distribution centres.

- A clearer strategy and proposition for expansion of the logistics sector would be beneficial. Improvements to the M1 and A1(M), trans-Pennine road links and the upgrade of the A63 near Hull through proposed Highways England schemes should improve road freight connectivity.

- Gauge enhancements will improve rail freight connections between Doncaster and the southern Humber Ports.

- There is scope for further improvements through TfN and the Northern Transport Strategy. This would include improving connections to the Panamax ports in Liverpool to allow movement of containerised freight by rail, and improving east-west road freight connectivity across the Pennines.
2.3.6.7 Aviation

Aviation Challenges
- Doncaster Sheffield Airport does not have a rail connection, and bus connections are infrequent. This constrains connectivity to and from the airport and surrounding Growth Area, and limits the UK market share the airport can capture, along with acting as a potential deterrent to inbound travellers. Both road and rail links to Manchester Airport are constrained in terms of reliability, capacity and frequency of train services.
- London’s hub airports are relatively inaccessible by rail from the north.

Aviation Opportunities
- Doncaster Sheffield Airport is identified as a Growth Area for the engineering and aero-industry, alongside housing growth. The airport is also future-proofed for passenger growth.
- FARRRS, opened in early 2016, and will ensure greater connectivity to the airport, Growth Areas and Urban Centres. Delivery of the 2nd phase of FARRRS provides direct access to the airport. Doncaster Sheffield Airport can benefit from further improvements to surface access, including a new community rail station. Surface access improvements to Doncaster Sheffield Airport would benefit the wider SCR.

2.3.6.8 Smart Mobility: The Proposition
- Smart Mobility: Smart Mobility maximises the opportunities arising from increasing urbanisation, intelligent transport solutions, big data, open data and a behavioural shift to a sharing economy.
- Integrated Mobility Platform: The proposition is to create an SCR Smart Mobility Platform. This will bring together data from multiple sources such as South Yorkshire Intelligent Transport System (SYITS), service operators, in-vehicle telematics, apps and user feedback to allow for the design and operation of a Smart Mobility network, supported by the Internet of Things. Although the scale of interventions is likely to vary between city, town and village, the ethos of ‘Smart Mobility’ is linked to behavioural change and implementation of integrated and innovative local transport. Operating on a ‘plug-in’ basis, the open source platform would provide a centralised function for information, ticketing, payment and data collection and storage. The result would be a seamless and integrated Smart Mobility network across SCR, spanning all modes and complementing investment into traditional transport infrastructure.
- Infrastructure to enable low emission vehicles (including buses and freight): SCR recognise the future role that low emissions vehicles can play in providing efficient and sustainable journeys for private, passenger and freight trips. We want to ensure that we have the infrastructure to enable the operation of these vehicles and remain an attractive investment location for innovative investors. We will continue to work with private sector operators / businesses to explore the most viable technologies.

- Sustainable Infrastructure: Invest in technologies to reduce the environmental impact of vehicles where it is commercially beneficial and has the greatest impact. This will help to ensure that as the SCR economy grows, our places remain attractive to people. Advances in battery technology offer the promise of a marked expansion in the use of electric vehicles with a concomitant need to strengthen the vehicle recharging network in the City Region.
**Transport**

**SCR CURRENT TRAVEL TO WORK**

- **Car**: 67%
- **Bus**: 9%
- **Motorcycle**: 1%
- **Train**: 2%
- **Bicycle**: 1%
- **Walking**: 10%
- **Workers Commuting within SCR Boundaries**: 85%

- **Average commuting distance 15km**
- **Increase of 17% 2011 vs 2001**

**Distance of Journeys to Work Across SCR**

- **25%** Contribution of transport to greenhouse gas emissions
- **27** Air quality management areas across SCR
- **300+** Premature deaths every year in Sheffield due to poor air quality

**Projected Growth in Travel Demand**

- **Highway Trips**
- **Public Transport Trips**

**TRANSPORT CHALLENGES AND OPPORTUNITIES**

- **Freight**
  22. Markham Vale freight growth area.
  23. Dearne Valley freight growth area.
  24. Doncaster port freight growth area.
  25. Access to Liverpool Ports constrained by Hope Valley Line capacity and loading gauge.
  26. Access between Doncaster and southern Humber Ports will be improved through gauge enhancements.
  27. A step change in the quality of trans-Pennine road and rail links would alleviate current capacity and reliability challenges.

- **Highway**
  12. Trans-pennine routes capacity and reliability constraints.
  13. Trans-pennine routes capacity and reliability constraints.
  15. Waverley link road will help unlock development land.
  17. FARRRS link road (under construction) will provide improved access RHADS.

- **Rail**
  1. Hope valley line capacity and journey time constraints.
  2. Capacity constraints at Sheffield station.
  3. Poor connectivity to Rotherham.
  4. Midland mainline capacity constraints.
  5. Midland mainline electrification delay.
  6. Poor connectivity to Worksop.
  7. Opportunity for rail connection to RHADS.
  8. Capacity constraints at Doncaster station.
  9. Opportunity for rail links to DN7 growth area.
  10. Station access improvements to facilitate growth.

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2.3.7 Waste

Three authorities within the SCR have produced a Joint Waste Plan which provides a detailed planning strategy for waste management facilities over the next decade. SCR must build on these efforts and seek to achieve involvement and alignment with other authorities across the City Region. Emerging EU legislation on the circular economy means that SCR will seek to move up the waste hierarchy, pursue opportunities for exporting waste processing services and integrate with electricity and heat generation. Furthermore, the scope to increase energy recovery from waste both from the SCR and neighbouring LEP areas offers an opportunity to provide heat for homes and businesses - we will seek to maximise these opportunities.

Existing waste management facilities within SCR are provided by four waste bodies and their respective contractors, with facilities comprising traditional landfill disposal, to recycling, gasification, composting and energy recovery facilities.

Waste Challenges

- Waste management provision within SCR must respond to national drivers to reduce the level of waste reaching landfill and a European driver to reduce the levels of waste arising, or promote their re-use and recycling to deliver a ‘zero waste economy.’ Specifically, emerging EU legislation ‘Circular Economy: Boosting Business, Reducing Waste’ will require SCR to demonstrate how the value of materials and energy used in products in the value chain is maintained, by minimising waste and resource use.
- The SCR does not represent a single waste partnership area, with respective evidence base documents for Local Authorities being of varying ages. Limited coordination means that there is an existing evidence gap to management of future waste.
- Additional waste facilities will be required to address future growth needs and meet any emerging shortfall over the next ten years. Planned future facilities are set out in the figure opposite.

Waste Opportunities

- Encourage a shift in waste management behaviours and continue to move waste ‘up’ the waste hierarchy: it is anticipated that the scale of growth in municipal waste is likely to be less pronounced through a shift in waste management behaviours.
- Ensure collaboration across waste authorities to review capacity requirements. Based on the future need requirements within emerging Local Plans, there is an opportunity to enter into a process of dialogue across waste authorities to ensure up-to-date capacity requirements across all waste types, including landfill provision, are maintained.
- Invest in next generation waste processing facilities that can not only handle the City Region’s waste, but that of neighbouring areas. This would allow SCR to export waste management capability and skills, attract additional infrastructure investment, and integrate waste management with provision of electricity and heat energy to homes and businesses.
- New legislation may require a refreshed approach to waste management to achieve the ‘circular economy loop’. This could result in an increase in skills development and business growth opportunities in the Green and Low Carbon Sectors, and continue to strengthen markets and supply chains for secondary raw materials.
Waste Management

WASTE TYPES

- **Municipal Solid Waste**: Regular waste from non-industrial sources, such as residential homes, restaurants, retail centres and office buildings.
- **Commercial and Industrial Waste**: Waste from manufacturing and service industries.
- **Construction and Demolition Waste**: Primarily received from construction sites, including concrete, rebar, carpet, wood etc.

FUTURE DRIVERS

- **Emerging EU Legislation on Circular Economy and Closed Loop Waste Management**: Legislation could require 70% municipal waste to be re-used and recycled by 2030, with landfilling of recyclable plastics, glass, paper and cardboard to be banned by 2030.

FUTURE REQUIREMENTS

- The Barnsley Doncaster and Rotherham Waste Plan identifies a need for 1 – 2 large scale commercial and industrial recycling, composting and waste treatment facilities with the potential need for additional capacity subject to changes to national targets and other related legislation over the next decade.
- Parkwood Springs is now partially closed (only accepting inert waste arising from construction). Residual waste is now taken to the Erin Landfill site in Chesterfield.
- Worksop and Retford, in Bassetlaw, have been identified as appropriate for small and medium waste sites.
- There are also a number of shortfalls in provision across Derbyshire.

EXISTING AND PLANNED WASTE MANAGEMENT INFRASTRUCTURE

- **ROTHERHAM**
  1. Grange Lane, Stairfoot, Municipal Waste Recycling Site
  2. Carlton Brickworks Landfill
  3. Timber Resource Recovery
     - Derby, former Houghton Main Colliery
- **SHEFFIELD**
  26. Bernard Road, Sheffield
  27. Parkwood Road Landfill Site (now partially closed)
  28. E.ON Blackburn Meadows Biomass Plant, Tinsley
  29. Sheffield MRF, Rotherham Road, Beighton
- **DERBYSHIRE DALES**
  24. Northwood HWRC
  25. Ashbourne HWRC
- **CHESTERFIELD**
  21. Chesterfield Stonegravels HWRC
  22. Erin Landfill
  23. Hall Lane Landfill, Staveley
- **BASSETLAW**
  25. Ashbourne HWRC
- **DONCASTER**
  4. Hazel Lane Landfill
  5. Bentley / Askern Landfill
  6. Bootham Lane, Hatfield Landfill
  7. Wroot Road Quarry, Composting Facility
  8. Briers Hill Farm, Thorne, Green Waste Composting and Recycling
  9. Long Sandall Municipal Waste
  10. Holme Hall Landfill Site
  11. Hatfield Power Park, Recycling and Recovery Facility
- **NORTH EAST DERBYSHIRE**
  18. Arkwright In-vessel Composting Facilities
  19. Claycross Proposed HWRC
  20. Alfreton Recycling Centre, Clover Nook Industrial Estate
- **NOTTINGHAMSHIRE WASTE DISPOSAL AUTHORITY**
  30. Eastwood Parkgate Municipal Recycling Centre
  31. Thurocroft Landfill, Rotherham
  32. Harycroft Landfill, Rotherham
  33. Bolton Road, Mansfield
  34. Althorne Steelworks Recycling Composting and Recovery (reserve site)
  35. Holbrook Combined Heat and Power Biomass

Key:
- Existing Schemes
- Planned Schemes
- Sheffield Waste Disposal Authority
- Barnsley, Rotherham and Doncaster Waste Partnership
- Nottinghamshire Waste Disposal Authority
- Derbyshire County Council Waste Disposal Authority
2.3.8 Energy

SCR has an ambition to advance a Low Carbon Energy Strategy for the City Region, integrated with waste and utilities. In order to achieve this goal, SCR will seek to reduce its reliance on fossil fuels, boosting investor confidence by providing greater stability over energy costs. With approximately 12,000 additional jobs targeted within the low carbon sector, SCR will seek to invest in this area by considering ways to move towards a circular economy. By supporting national objectives on Climate Change, SCR can ultimately achieve greater security over our energy supply.

Sheffield City Region’s long-term vision is to achieve energy resilience by actively pursuing opportunities for an efficient, economical and sustainable energy supply. The City Region is already advancing its approach towards greener growth and greater energy supply resilience.

A secure, affordable supply of energy is critical to the smooth functioning and competitiveness of the economy, and is closely correlated with economic output. A reliance on fossil fuels, together with supply side conditions in energy markets, leads to fluctuations in energy prices that can be damaging to the economic performance of an area. Without intervention, energy price volatility and issues of supply are forecast to worsen in future years.

In order for SCR to become more resilient and less affected by external fluctuations in the energy market, there is a strong case for SCR to move towards a low carbon energy supply as well as shifting towards a circular economy. A low carbon industry is a key growth sector for SCR, and decarbonisation should be valued in the deployment of energy infrastructure.

Moving toward cleaner energy generation could bring the following benefits to SCR:

- Greater control over energy costs: This could provide both business and residents with greater stability, giving them confidence to invest, boosting the economy and supporting job and business growth.

- Low carbon sector growth: The SCR SEP sets a target for approximately 12,000 jobs in this sector by 2025.

- Moving towards a circular economy: Creation of an energy ecosystem that not only generates low carbon electricity, but other products such as heat, hydrogen fuel, food and waste processing.

- Contribute to addressing national challenges: Namely supporting the UK in meeting the requirements of the Climate Change Act (80% less CO2 emissions by 2050, compared to 1990 levels), keeping the lights on by addressing the energy generation gap, and achieving greater security over our energy supply.

The following demonstrate examples of current best practice within SCR:

- The local authorities of Barnsley, Doncaster and Rotherham are working in partnership to reduce landfill and jointly manage waste generated by the three boroughs. The Partnership has secured £77.4m of Private Finance Initiative (PFI) funding from central government towards new facilities to deal with the treatment of leftover waste rather than send it to landfill. The Manvers waste facility processes and recycles or packages up waste to be sent to power stations to be burnt. In future, there is also the potential for other SCR authorities to come on board to further improve waste management across the City Region.

- Barnsley MBC’s recently developed Energy Strategy (2015-2025) sets out the Council’s case for greater investment in energy. Barnsley recognises that alongside other large organisations, it is a major consumer of energy and emitter of greenhouse gases. The Strategy therefore highlights a range of energy efficiency projects which aim to provide Barnsley with a number of economic, social and environmental benefits.

The SCR will build upon these examples of current best practice as well as create new and innovative ways to ensure sustainable energy generation over the coming decades.
Energy Challenges

- Government data shows that in 2013 Yorkshire and Humberside’s non-domestic gas consumption was 35% higher than the national average and non-domestic electricity consumption was 14% higher. This is driven by high energy consuming industries (e.g. steel production and heavy manufacturing). Supply interruption and affordability are challenges to the resilience of our industrial and advanced manufacturing sectors.

- The Centre for Low Carbon Futures calculated that the 2011 SCR energy bill was £3.41 billion per year, and that this would grow to £4.59 billion by 2022 – a £1.18 billion increase. With the annual GVA output of SCR standing at approximately £28bn, energy costs constitute over 10% of economic output; a significant proportion.

- As is the case for most LEP areas, SCR largely consumes fossil fuels as its main source of energy, with an energy bill which could increase from £3.4bn per annum to £4.6bn per annum by 2022.33 A high upfront capital cost of delivering energy efficient or low carbon infrastructure, uncertainty surrounding financial support and lack of financial consequences for failing to decarbonise present key challenges to the delivery of energy infrastructure across the Urban Centres, Growth Areas and SCR as a whole.

- A lack of an overarching strategic approach towards delivery of energy infrastructure or attracting investment does limit opportunities for integration to take place.

Energy Opportunities

- There is an opportunity to capitalise on the low carbon energy market and meet the Mini-Stern Review Objectives for SCR, bring £3.7bn of investment into SCR, create 3,000 jobs and deliver an additional £147m of GVA every year.

- The industrial legacy of SCR provides opportunities to make use of grid connection points to feed in electricity generated from larger scale generation (e.g. biomass plants or solar farms). In addition, Eon’s expansion of the district heating network to the Lower Don Valley offers further opportunity for import and export of heat energy generated from biomass, waste or other sources. Advances in capture and storage techniques may offer opportunity for a resurgence of the more traditional energy generation methods (e.g. coal and gas).

- Low-carbon energy generation can support decarbonisation across other sectors, such as the charging of electric vehicles or production of hydrogen fuel by electrolysis. A further opportunity could include the integration of energy generation investment with waste management, to address the dual challenge at a reduced cost. Consideration should be given to locating energy generation near to future users rather than uploading to the grid.

- There is an opportunity to secure a continued future for energy generation at the Trentside power stations of Cottam and West Burton, utilising their grid connections to deliver cleaner energy to the grid following the planned closure of the current coal fired power stations at these sites.

- Building on work already undertaken in the region, advance an integrated Low Carbon Strategy to identify suitable generation types, locations and necessary supply companies as well as more efficient methods of use, and support SCR in attracting investment from sources such as the Green Investment Bank, and private developers. The Energy Strategy will include the following:

  - Identify opportunities for low carbon projects across a number of technologies and sectors, and augment the world leading research and development by Universities and businesses in SCR.

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33 The Economics of Low Carbon Cities – A Mini-Stern Review for the Sheffield City Region (Gouldson et al, 2013)
• Identify suitable sites for new schemes, including the ability to connect to the existing electricity network and support that may be available through enabling infrastructure investment.

• Set out smaller scale local energy projects that engage the local community.

• Seek opportunities to expand the existing heat network and explore ways to develop such networks in Growth Areas and Urban Centres.

• Encourage more energy recovery facilities which import waste streams from neighbouring regions and generate additional heat and power for the benefit of SCR.

• Set out the approach to working with Government on the design of future incentives for renewables.

- Promote greener growth through the following policy interventions:

  • Support Local Plan makers in setting the energy standards that SCR properties must conform to.

  • Promote SCR becoming a world leader in the creation of a zero-carbon built environment.

• New buildings should contribute to the development of zero carbon infrastructure or generating their own energy through renewable sources, they should also be as energy efficient as possible through an incremental and structured ratcheting of energy efficiency standards.

• Build energy schemes in to wider infrastructure proposals, including transport schemes.

The Low Carbon Energy Strategy must be monitored and updated regularly to demonstrate progress and evolve to remain current, reflecting the changing regulatory, commercial and technological landscape.
**Energy**

**CURRENT SCR ENERGY USE**

- **Coal**: 40%
- **Gas**: 35%
- **Electricity**: 18%
- **Manufactured Fuels**: 1%
- **Bio Energy and Waste**: 2%

**Planned Schemes**

<table>
<thead>
<tr>
<th>Renewable Energy</th>
<th>Capacity (MWe)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anaerobic Design</td>
<td>5</td>
</tr>
<tr>
<td>Biomass (dedicated)</td>
<td>32.9</td>
</tr>
<tr>
<td>EfW Incineration</td>
<td>22.3</td>
</tr>
<tr>
<td>Solar Photovoltaics</td>
<td>14.916</td>
</tr>
<tr>
<td>Wind Onshore</td>
<td>10.9</td>
</tr>
<tr>
<td>Total</td>
<td>71.2</td>
</tr>
</tbody>
</table>

**Opportunities**

- Meet objectives of the **Mini-Stern Review** for SCR
- Opportunities to bring **£3.7bn** of investment into SCR
- Creating **3,000** jobs
- Additional **£147m** GVA every year
- Strengthened energy sector and supply chains to allow for export of skills and services

**Key Drivers for Decarbonisation**

- **Climate Change**
- **Reducing Emissions by 80% by 2050**
- **Jobs and GDP Retention and Growth**
- **Rising Cost of Energy**

**Secure and Reliable**

- 5.1% de-rated electricity capacity margin for winter 2015/16
- Circa 50% of UK energy is obtained from imported energy

**Affordable and Profitable**

- The SCR's energy bill is £3.4bn per annum and could increase to £4.6bn per annum by 2022

**Sustainable and Low Carbon Energy**

- Need to decarbonise and reduce CO₂ by 80% by 2050 (relative to 1990 levels)
- SCR is already one of the greenest locations in England
- Proximity to large energy users to explore potential for CCS
- Fertile soils in Yorkshire and Humber to grow energy crops
- Significant academic expertise in low carbon generation

**Sheffield’s District Heating Networks**

- 2 major networks operated by Eon and Veolia capable of supplying **85MWth** of heat to homes and businesses along with enough electricity to power **64,000** homes
- **18+** local community heat energy schemes
- **1.8MWth** heat capacity of the proposed Holbrook biomass plant
Low Carbon Energy Ecosystem

Energy from Waste
- Waste
- Biocrop Production (eg. Miscanthus)
  - Electricity
  - Heat

Intensive Agriculture
- Biomass
  - CO₂
  - Heat
  - Electricity to Grid

Low Carbon Energy Ecosystem
- Supporting electric car ownership
- Trialling battery storage technology
- Addressing air quality challenges
- Using our land and assets more efficiently

SCR GREENER GROWTH NETWORK
- Solar panel covered car park
- Battery storage
- Electric vehicle charging
- Grid

Create SCR Energy Company
- Greater control over energy costs
- Create stability for business; this encourages investment and growth
- Low carbon skills; expert nationally and internationally
- Create products; hydrogen, waste processing capability, low carbon food

Supporting the logistics sector
- Advanced manufacturing
- Low carbon energy for transport

eg. SHEFFIELD
- Address waste capacity shortfall
- Closed loop waste management
- Support low carbon housing growth
- Integrate district heating network

eg. THE DEARNE
- Energy generation
- Efficient horticulture
- Reduced food miles and traffic

eg. M1 CORRIDOR
- Intensive Agriculture
- Energy generation
- Efficient horticulture
- Reduced food miles and traffic

Low Carbon Electrolysis
- Hydrogen Fuel
- Water

Hydrogen
- Electrolysis
- Low Carbon Energy Ecosystem
- Intensive Agriculture
- Energy from Waste

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2.4 Spatial Packages & Highway Network Interventions

Packages of infrastructure interventions have been identified, based on the network analysis summarised in the previous sections, and these are shown by the mapping on the following pages.

There are seven identified Growth Areas across the City Region, each of which have a number of different infrastructure challenges and opportunities to be realised as indicated in Annex C Analysis of Challenges & Opportunities for Growth.

To maximise efficiencies and increase the value of infrastructure investment made in the Growth Areas, holistic, integrated packages of interventions are proposed. The rationale behind this is to ensure that all solutions (especially those which require multi-sector / agency intervention) are resilient, complementary and opportunities for linked and enhanced investment are explored.

It is proposed that infrastructure interventions within Growth Areas are integrated within a wider framework which articulates the approach to development and growth within these areas, at both a strategic and more localised level. This will:

- Provide a further level of detail that the development market and investors will need in order to understand the proposition, identify opportunities and gain the confidence to invest.
- Provide the basis for investment in strategic infrastructure, by demonstrating the nature of the growth that it will support.

<table>
<thead>
<tr>
<th>Summary of Key Spatial Recommendations by SEP Growth Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A61 Corridor &amp; Chesterfield:</strong> Address transport capacity issues on the A61, A619 and A617. Provide infrastructure to support ‘The Avenue’ and ‘Staveley Works’ developments. Tackle flood risk that affects the railway station and 1,000 – 2,000 properties in the Chesterfield area.</td>
</tr>
<tr>
<td><strong>Dearne Valley – Junction 36:</strong> Capitalise on low carbon opportunities in the Dearne Valley. Enhance the freight role of the Dearne Valley. Need to better connect through the Dearne Valley into the TransPennine portal. Fluvial flooding affects strategic access to the M1.</td>
</tr>
<tr>
<td><strong>DN7:</strong> Significant opportunity for growth in the low carbon sector through infrastructure provision (Carbon Capture). Flood defences required and transport connectivity enhancements (including rail station improvements and a link road) to support the major ‘Unity’ development.</td>
</tr>
<tr>
<td><strong>Advanced Manufacturing Innovation District:</strong> Provide high quality connections to address accessibility challenges in the area. Tackle delay on A630, A633, A57 and A6178. Bring forward opportunities for energy generation and tackle flood risk along the Don Valley corridor. Connections into this area are an essential component of the HS2 connectivity package.</td>
</tr>
<tr>
<td><strong>Markham Vale:</strong> Building on the SCRIF investment in enabling infrastructure, the Markham Vale site requires further investment to support viability of the former Coalite site.</td>
</tr>
<tr>
<td><strong>Airport Corridor:</strong> Capitalise on the opportunity presented by the airport by providing rail connectivity. Overcome a number of transport capacity constraints including Doncaster rail station. Promote greener growth and low carbon development.</td>
</tr>
<tr>
<td><strong>Sheffield City Centre:</strong> Key challenges of congestion on arterial routes. Need to plug broadband gaps and tackle fluvial flooding risk. Infrastructure required to support Sheffield Retail Quarter. A waste capacity shortfall has also been identified in the City Centre. It is essential that the HS2 station is connected to the wider city region.</td>
</tr>
</tbody>
</table>

Given the already developed nature of Urban Centres, infrastructure interventions for these areas tend to be more discrete in nature and aimed at tackling a specific challenge, or unlocking a particular opportunity. Where relevant, strategic interventions are identified within these areas.
**A61 Corridor & Chesterfield**

“The A61 Corridor represents a strategic growth opportunity, linking a number of major mixed-use development sites with significant regeneration and job creating potential.”

**A1: A61 Strategic Capacity Enhancement**
Interventions to reduce delay impacts on this strategic transport corridor, that will otherwise result from economic growth.

**A2: Greener Growth**
Identify and bring forward opportunities for low carbon energy generation to support greener growth throughout the A61 corridor. The proposed strategy for an SCR Low Carbon Energy Ecosystem will help to define these, and they could include decentralised energy generation, district heating networks, electric and hydrogen recharging stations for vehicles.

**Dema Glass Site**
Completed regeneration of the former Dema Glass Site, as part of the wider regeneration of the A61 corridor, for Chesterfield Football Club ‘Proact Stadium’ and retail uses (including Tesco Extra). There is potential to also open a future park and ride service to operate from the stadium car park.

**Chesterfield Waterside**
Large mixed-use regeneration programme providing 30,000 sqm of commercial development immediately north of Chesterfield railway station, near the A61, surrounding the River Rother and Chesterfield Canal. The scheme, arising from the old Trebor Factory and Arnold Laver site, will result in the creation of 1,500 new apartments and houses, creation of Grade A office space and retail units, and a network of open spaces.

**Northern Gateway, Chesterfield**
Major mixed use regeneration scheme as extension to Chesterfield town centre, delivering 130 new homes and 860 jobs.

<table>
<thead>
<tr>
<th>GROWTH AREA</th>
<th>TOTAL EMPLOYMENT</th>
<th>TOTAL HOUSING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Increase</td>
<td>% change (2014 - 2024)</td>
</tr>
<tr>
<td>A61</td>
<td>3,954</td>
<td>9%</td>
</tr>
<tr>
<td>Growth Sectors:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tourism, Leisure</td>
<td>3,070</td>
<td>16%</td>
</tr>
<tr>
<td>and Sport, Retail</td>
<td></td>
<td></td>
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<tr>
<td>Health: Business</td>
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<tr>
<td>Services and</td>
<td></td>
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<tr>
<td>Advanced Manufacturing</td>
<td></td>
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</tbody>
</table>

**A6: Chesterfield Rail Station Flood Alleviation**
Tapton Terrace and the area surrounding Chesterfield Station is considered as being at significant or frequent risk of flooding from the River Rother. Consider interventions to alleviate risk.

**A7: Flood Risk Management**
There are 1,000 - 2,000 properties at risk within the Chesterfield area. Interventions could include introduction of SUDS schemes alongside larger scale flood defence work.

**A8: Infrastructure to support The Avenue**
Investment to support The Avenue would support provision of 1,100 new homes, 4-5 ha of employment land; 70 ha public open space, a primary school and community facilities including football and cricket pitches. The Avenue flood balancing reservoir is identified as a construction scheme within the governments Flood and Coastal Risk Management Programmes 2015 - 2021. This would result in 90 households with improved standard of protection.

**A9: Peak Resort**
Interventions to provide infrastructure for the Peak Resort site, including new site access. Peak Resort will become a major tourism, leisure and education destination. The scheme will be delivered in 3 phases and will provide 1,200 jobs upon completion in 2018.

**A10: Chesterfield - Staveley Regeneration Route**
Identified in the SCR Transport Strategy, the Chesterfield Staveley Regeneration Route could help support redevelopment of the Staveley Works Area and relieve congestion on the A619 corridor between Chesterfield and M1 J28A. It would also provide opportunity to enhance links to Markham Vale.

**A11: Egstow Park**
200 acre mixed use development site forming an urban extension to Clay Cross and delivering up to 980 new homes and serviced employment plots from 1 acre upwards.

**A12: Callywhite Lane Industrial Estate**
The Callywhite Lane Industrial Regeneration Project in Dronfield involves site assembly, reclamion of 19 ha of land and road infrastructure providing 47,000 square meters of business units in Use Classes B1 / B2 / B8 and up to 1,200 jobs.

**A3: A619 & A617 Strategic Capacity Enhancement**
Interventions to reduce delay impacts on this strategic transport corridor, that will otherwise result from economic growth.

**A4: Staveley Works Infrastructure**
Long term vision to develop and regenerate 150 ha of industrial land in the Staveley Area of Chesterfield to remove industrial dereliction, implement necessary infrastructure and improve the landscape. 1,500 homes are proposed on the site with potential for the creation of up to 800 jobs, including those at the proposed HS2 Infrastructure Maintenance Depot.

**A5: Urban Mobility**
Place-based urban mobility solutions to improve access to the strategic transport network, urban centres and transport nodes such as rail and bus interchanges.

**A619 and A617 Key Highway**
Connections to Meadowhall South Yorkshire HS2 Station
Direct rail services from Chesterfield to Meadowhall are already in place, but would benefit from increased frequency and reduced journey time through HS2 connectivity package.

© Arup
Deane Valley, M1 & Junction 36

“Capitalise on access to the motorway network to unlock employment land and enhance the freight role of the Deane Valley. Improve connections between the A1 and M1 through the Deane Valley and further west via the TransPennine portal. Address fluvial flood risk to ensure resilient access from the strategic highway network to the M1 motorway.”

DV1: Enhanced Connections between Doncaster & Barnsley

Interventions could include bringing forward low carbon schemes and energy generation, or linkages to Ferrybridge and supply chains. This may have the benefit of reducing energy costs for key employers.

DV1: Trans-Pennine Connectivity Opportunities

Provision of transport infrastructure to allow access from Barnsley to any future trans-Pennine road or rail link delivered through the Transport for the North programme.

DV2: Dearne Valley Low Carbon Sectors

Support growing logistics and distributions sectors within the Deane Valley, and recognise need to improve connectivity to A1(M).

DV3: A6135

Road identified as "Top 20 Increased Transport Delay Corridor" based on the FLUTE Model outputs.

DV4: Dearne Valley Flood Risk Mitigation

Support growing logistics and distributions sectors within the Deane Valley, and recognise need to improve connectivity to A1(M).

DV5: Dearne Valley Stations

Thurnscoe, Goldthorpe and Bolton-on-Deane are located along the Wakefield Line where there is 1tph between Leeds and Sheffield. These lines are identified as having a strong travel demand, but poor public transport connectivity. Potential interventions, set out within the Barnsley Rail Vision, include better station access and improved connectivity. Options can be explored to enhance existing railway stations or consolidate them to provide a new Park & Ride station and community hub with increased frequency of services and improved journey times to Leeds and Sheffield.

DV6: Dearne Valley Freight

Support growing logistics and distributions sectors within the Deane Valley, and recognise need to improve connectivity to A1(M).

DV9: Addressing Capacity Shortfalls to Unlock Development

Identify and address capacity shortfalls to deliver new development along the M1 corridor. Specifically, there is an understanding that BMBC have around half the power required to deliver planned development within the Hoyland area.

DV7: M1 Flooding Concerns

Consider interventions which reduce fluvial flooding that limits strategic access across the Borough, with restricted access to the M1.

DV10: Goldthorpe

Interventions to improve public transport connections and the provision of business support have potential to make development sites commercially viable.

DV11: Trans-Pennine Connectivity Opportunities

Provision of transport infrastructure to allow access from Barnsley to any future trans-Pennine road or rail link delivered through the Transport for the North programme.

DV12: Dearne Valley Parkway

Explore options for improvements to the Dearne Valley Parkway to improve traffic flows and support growth proposals.

DV13: Gladman Park Enterprise Zone, M1 Junction 36

Established development with potential for additional developments between 50,000 and 100,000 sq ft. Occupiers include Mercedes Benz, HSBC, Volvo, Company Shop, ITAB, AECOM and Distinction Doors. Additional developments between 50,000 and 100,000 sq ft. Occupiers include Mercedes Benz, HSBC, Volvo, Company Shop, ITAB, AECOM and Distinction Doors.

DV14: Thurnscoe Business Park

This business park is one of the largest employment sites that remains to be developed within the Deane Valley. The site area is 15 acres and presents an opportunity for local expanding business to potentially acquire freehold plots to develop their own smaller premises.

DV15: Junction 36 SCRF Funded Hoyland Investment

Accelerate the development of 23.37 ha of existing employment land and a further 104.29 ha of new employment land, creating 4,554 gross direct jobs and indirectly helping to release 2,000 homes.

DV8: Assess Opportunities for Integrating Infrastructure Sectors

Following on granting of planning consent for the Timber Resource Recovery Centre at the former Houghton Main Colliery, Local Authorities should consider opportunities for linking this facility to the town centre district heating network or other opportunities for integrating infrastructure sectors within the area. The Timber Resource Recovery Centre will generate up to 20MW of low-carbon energy and enough to power around 49,000 homes.

DV16: Ashroyd & Shortwood 1 & 2 Enterprise Zone, Dearne Valley Parkway

These Business Parks in Barnsley offer 10.5 ha of development opportunities for light industrial and manufacturing businesses. The sites are 3.5ha in size and would suit small and medium-sized businesses looking to grow in niche markets. Detailed Planning Consent has been achieved for 10,000 and 15,000 sq ft of high quality industrial units at the Shortwood site.

DV2: Dearne Valley Low Carbon Sectors

Support growing logistics and distributions sectors within the Deane Valley, and recognise need to improve connectivity to A1(M).

DV6: Dearne Valley Freight

Support growing logistics and distributions sectors within the Deane Valley, and recognise need to improve connectivity to A1(M).

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DV1: Enhanced Connections between Doncaster & Barnsley

Reduce forecast delay impact on A635 between Barnsley and Doncaster, potentially through BRT to address gap in mass transit.

DV12: Dearne Valley Parkway

Explore options for improvements to the Dearne Valley Parkway to improve traffic flows and support growth proposals.

DV13: Gladman Park Enterprise Zone, M1 Junction 36

Established development with potential for additional developments between 50,000 and 100,000 sq ft. Occupiers include Mercedes Benz, HSBC, Volvo, Company Shop, ITAB, AECOM and Distinction Doors. Improved public transport connections would support access to employment. Support to improve the commercial viability of these sites could help to accelerate development.

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DV17: M1 Flooding Concerns

Consider interventions which reduce fluvial flooding that limits strategic access across the Borough, with restricted access to the M1.
Infrastructural Package 2.1

Barnsley Urban Centre & M1 Junction 37

“Growing economy; creating an M1 economic corridor, thriving town centre and outstanding cultural heritage.”

Sheffield City Region, Strategic Economic Plan 2014

BN1: Interventions to Improve A635 & A637
Road identified as ‘Top 20 Increased Transport Delay Corridors’ based on the FLUTE Model outputs.

BN2: Urban Mobility
Encourage modal share away from private car usage.

BN3: Improve Hallam Line Connectivity
Line forecast to experience worsening crowding levels and capacity challenges. This is compounded by uncompetitive journey times. Interventions will comprise increasing capacity and quality of services and reducing journey times.

BN4: Infrastructure to Support J37 Barnsley Urban Growth Area
To create a mixed use site with up to 43ha employment land with up to 3,400 jobs and 1,700 homes with associated servicing and community facilities (proposed designation MU1 in Local Plan).

BN5: Improvements to Barnsley Town Centre Public Realm
To maximize the impact of the £100 million Better Barnsley retail and leisure scheme a package of infrastructure interventions are required to act as a catalyst for further investment in the town centre. These will strengthen commercial viability of key sites, improve public realm, and investment in the transport interchange to support a future increase in rail station capacity alongside improved linkages to other sites in the wider town centre.

BN6: Capitol Park Enterprise Zone, M1 Junction 37
8.75ha of available development space offering bespoke design and build units at the Strategic Gateway Enterprise Zone site at Junction 37 of M1. Existing occupiers include Ramada Encore, the Christy Group, Encore, Pit Stop Productions and Kings Capital Clinic. Improved public transport connections would support access to employment. Support to improve the commercial viability of these sites could help to accelerate development.

BN7: Penistone Line (rail)
Introduce new diesel rolling stock and increase frequency of service to 2tph. Provide 3 80 space P&R sites and upgrade 3 stations.

BN8: A628 Dodworth Road
Explore options to increase capacity on A628 Dodworth Road between Junction 37 and Barnsley Town Centre.

Junction 37 Capacity Improvements
Interventions to improve capacity at Junction 37 and unlock wider growth aspirations within Barnsley.

Key:
- Growth Area
- Key Highway
- Rail Line
- Urban Mobility Zone

Growth Area

<table>
<thead>
<tr>
<th>GROWTH AREA</th>
<th>TOTAL EMPLOYMENT</th>
<th>TOTAL HOUSING</th>
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<tr>
<td></td>
<td>Increase (2014-2024)</td>
<td>Contribution to SEP (total of 70,000)</td>
</tr>
<tr>
<td>Barnsley Urban Centre &amp; J37</td>
<td>1,113</td>
<td>1.6%</td>
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</tbody>
</table>

Growth Sectors: Retail, Health, Business Services, Advanced Manufacturing and Tourism, Leisure and Sport.
“This mixed-use growth corridor will include a cluster of green businesses (including research and development opportunities) and hi-tech companies with new direct access to ports and the motorway network using low carbon technologies which will contribute to UK power needs and become one of the most advanced energy parks in the SCR, with its impact felt across the wider northern economy.”

**DN1: Focus on Low Carbon Industry**

DN7 is identified as becoming a centre for mixed use growth in low carbon and ‘green’ industry. Identify key synergies and opportunities between low carbon sectors in DN7 and increasing energy resilience across SCR.

**Employment & Commercial Property Growth**

DN7 will result in the unlocking of 300,600sqm B1 office, 140,800sqm of B2 light industrial and 670,000sqm B8 warehousing.

**Key Growth Sectors:** Tourism, Leisure and Sport; Retail; Health; Business Services and Advanced Manufacturing.

**Key:***
- Growth Area
- Key Highway
- Rail Line

**Black Text:** Proposed SCRIIP Interventions

**DN2: DN7 Flood Risk**

Portions of DN7 are located on Doncaster Floodplains, which are affected by coastal and fluvial flooding. Identify methods of site-based alleviation and directing development out of areas of flood risk.

**DN3: Infrastructure to Support Unity Masterplan**

The Junction 5/M18 Growth area, or DN7, is the focus for the ‘Unity Masterplan’. Based on a complex range of constraints and opportunities, the area would seek to deliver 1,200 homes by 2028 and an employment area. Interventions will include infrastructure to support the masterplan for the site, which comprises:

- **Unity Life:** A predominately rural development, with consent for a 500 berth marina and plans to accommodate up to 1,440 new homes by 2028. The first plan period will also result in the delivery of 400 homes in Stanley.
- **Unity Living:** This sub-area will accommodate up to 1,105 new homes and greater connectivity to Bootham Lane.
- **Unity Connect:** Deliver approximately 50 hectares for manufacturing and logistics business.
- **Unity Link:** Gateway to development at Junction 5 of the M18, which will comprise approximately 86,400m² for commercial occupation, a new Moto motorway service area and a new 120 bed hotel.
- **Unity Energy:** Area which has permission for a 900MW carbon capture power station, materials recycling facility and opportunity for a rail freight handling capability.
- **Unity Town:** This will provide up to 555 new homes in the long-term (post-2028) and will include a mix of homes and district retail facilities.

**DN4: Utility Infrastructure**

Ensure utility network is in place to support ‘Power Park’.

**DN5: Connections to Low Carbon Sector**

Explore connections to Ferrybridge and Drax multi-fuel storage and Humber renewable fuels terminal. Interventions could include improving the rail gauge clearance for biomass transshipment, or identifying connections for a wider carbon capture network.

**DN6: Transport Hub & Opportunities for Rail Links**

Infrastructure interventions to support overall growth of DN7 could comprise construction of a rail station or bus interchange.

**Creation of a Link Road**

Creation of a new link road from Junction 5 of the M18 to Hatfield improving access to the Don Valley Power Park. This scheme is identified in SCRIP.

**M18 Congestion**

M18 is considered to be a key area of congestion, particularly where it joins the A1(M). Improvements have been undertaken to Junction 2 and 3 through the national Pinch Point Programme.

**GROWTH AREA**

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<tr>
<th>GROWTH AREA</th>
<th>TOTAL EMPLOYMENT</th>
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</thead>
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<tr>
<td></td>
<td>Increase</td>
<td>% change (2014 - 2024)</td>
</tr>
<tr>
<td>DN7</td>
<td>243</td>
<td>3%</td>
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</table>

**Key Growth Sectors:** Tourism, Leisure and Sport; Retail; Health; Business Services and Advanced Manufacturing.
Advanced Manufacturing Innovation District

“The Advanced Manufacturing Innovation District represents the largest cluster of modern manufacturing in the SCR and also includes a major retail centre, first class sporting facilities and popular cultural attractions.”

SR7: Waste Management
As a capacity gap exists encourage further changes in waste behaviours to minimise growth in waste levels and further consider where a ‘closed loop economy’ could be achieved, e.g. through further expansion of energy generation from waste.

SR8: Templeborough
Provision of a package of financial, planning and support incentives to encourage investment in Templeborough. The area represents a number of commercial development sites located in close proximity to Junction 33 and 34 of the M1. These sites are located in the SCR Enterprise Zone and benefit from Business Rate Relief and Enhanced Capital Allowance.

SR6: Greener & Low Carbon Growth
Identify and bring forward opportunities for energy generation to support greener growth of the Sheffield-Rotherham corridor. Synergies between the AMP and low carbon growth should be explored further.

SR11: Cycle Superhighway
Proposed Rotherham-Sheffield Cycle Superhighway providing connectivity between the two urban centres and improved access to AMID.

South Yorkshire Tram-Train Pilot:
Sheffield - Rotherham & Tinsley Chord
SYPTE were awarded £51 million from DfT to undertake a two-year pilot of a tram-train network. Operating on both tram and heavy rail infrastructure, the Tram Train service will provide connections between Sheffield and Rotherham, providing an alternative option to the car and unlocking employment opportunities.

SR1: Expansion of the AMID nucleus (AMP and SBP)
Infrastructure to support expansion at the nucleus of the Advanced Manufacturing Innovation District (AMID). Plans to provide a high quality local centre with good quality public realm in the central area between the AMP and Waverley housing development which will form a key part of the nucleus for the wider AMID area. Interventions to provide connectivity within the nucleus including public transport, cycling and walking. A high quality development of retail, restaurants, coffee shops, health centre, hotel and conferencing facilities to serve the needs of the AMID will be encouraged to act as a draw across the wider area and provide the much needed facilities to ensure the area works as a viable, vibrant and dynamic
corridor. Intervention including new mass transit links improving access to the nucleus which encompasses AMP1 and Waverley combined with AMP2 and the Sheffield Business Park.

SR3: A630 & A6178 Increased Transport Delay Corridors
These roads were identified as increased transport delay corridors within the FLUTE model.

SR4: Flood Risk
Areas of Sheffield-Rotherham Don Valley Corridor are at risk from fluvial flood risk. Investment in flood risk reduction through the Rotherham and Lower Don Valley Flood Alleviation scheme is already enabling investment in these areas and providing a model for partnership funding. Continued integration of flood alleviation schemes, SUDS and water management schemes within Local Centres could present opportunities to realise the regeneration benefits of blue and green infrastructure.

SR5: High Quality Multi-Modal Access to the nucleus of the Advanced Manufacturing Innovation District (AMID)
Intervention including new mass transit links improving access to the nucleus which encompasses AMP1 and Waverley combined with AMP2 and the Sheffield Business Park.

SR10: M1 Junction 34
Allocate capacity constraints at this junction.

Advanced Manufacturing Park
Provides high quality infrastructure including integrated transport, social spaces, incubation/start-up/accelerator facilities and high-quality education, research and development. Includes Hydrogen refuelling station which is completely self-sufficient and uses wind power combined with water to produce hydrogen.

Widening of Sheffield Parkway
Widening of the A630 to a dual 3-lane road between the M1 Junction 33 and Catcliffe Interchange.

Key:
Key Highway
Cycle Superhighway
Rail Line
Urban Mobility Zone
Sub-areas of AMID:
Foundation Anchors
Manufacturing and Technology Cluster
Foundation Industries
Sport, Leisure and Retail Corridor
New Neighbourhoods
Black Text: Proposed SCRIIP
Interventions
SR4: Flood Risk
Areas of Sheffield – Rotherham Don Valley Corridor are at risk from fluvial flood risk. Investment in flood risk reduction through the Rotherham and Lower Don Valley Flood Alleviation scheme is already enabling investment in these areas and providing a model for partnership funding. Continued integration of flood alleviation schemes, SUDs and water management schemes within Local Centres could present opportunities to realise the regeneration benefits of blue and green infrastructure.

SR16: Tram Train Stop at Magna / Templeborough
An additional tram-train stop at Magna / Templeborough would improve access to employment opportunities, provide an alternative to car use and support economic growth.

SR13: Heavy Rail Connections
Long-term ambitions for improved heavy rail connections due to constraints at Rotherham Central.

SR11: Rotherham to Dearne Valley Corridor
Road identified as a highway corridor forecast to experience increased delay based on Flute Model outputs.

SR14: Rotherham Town Centre Masterplan
An emerging masterplan will provide a spatial strategy for the town centre to facilitate the delivery of 2,000 residential units, the redevelopment of Forge Island, an improved High Street, an extended flood alleviation scheme and a revitalised Bus Interchange, HE Campus and Markets to increase attraction for visitors and investors.

Tram Train to Rotherham Central
The South Yorkshire Tram Train Pilot will provide stops at Magna and Rotherham Central, providing an alternative to car use and unlocking employment opportunities.

Rotherham Urban Area & Bassingthorpe Farm
Rotherham Urban Area: The Adopted Core Strategy provides indicative targets for 5,471 homes and 71ha of employment land in the Rotherham Urban Area (including Bassingthorpe Farm Strategic Allocation) for 2013-2028.

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Rotherham Town Centre
“Developing strengths in new economic sectors as part of SCR’s wider regeneration agenda with a specialism in manufacturing.”

Sheffield City Region, Strategic Economic Plan 2014
Markham Vale & Bolsover

“A key part of the advanced manufacturing hub in collaboration with the D2N2 LEP.”

Markham Vale – Staveley Link
Opportunity for future link to Staveley Works, Chesterfield Staveley Regeneration Route and the A61 Growth Corridor via the Staveley Northern Loop Road.

Markham Vale North
A total of 750,000 sq ft will be available for occupation by B2 and B8 uses from 2016.

M1 Capacity
Key Junction Capacity Challenges exist between Junction 28 and 32 on the M1. Current works to enhance the motorway to a Smart Motorway will help to relieve congestion and improve journey time reliability.

Markham Vale East
Outline planning has already been granted for B2 and B8 use, with detailed consent being granted for specific schemes. Markham Vale East comprises 25 hectares of development land with 3 hectares remaining.

Markham Vale – Seymour Link Road
This will unlock the Phase 3 area of Markham Vale, releasing an additional 33 hectares for commercial / industrial development. This is to be principally located on the site of the former Seymour Colliery / Stocking Ground.
The site is located within the SCR Enterprise Zone, benefitting from Enhanced Capital Allowance.

Markham Vale – Staveley Link
Opportunity for future link to Staveley Works, Chesterfield Staveley Regeneration Route and the A61 Growth Corridor via the Staveley Northern Loop Road.

Markham Vale West
The West is a 15 acre site comprising high-value leisure, hotel, retail and restaurant opportunities of up to 50,000 sq ft with units available. Outline planning has been granted for B1, B2 and B8 use and Design & Build options are available, ensuring that businesses have the right space in which to trade competitively.

MV1, MV2 & MV3: Markham Vale
The total site comprises 80 hectares of employment land, of which approximately 20 hectares has Enterprise Zone status.

MV4: Former Coalite Site
Infrastructure to support regeneration of the former Coalite site to a mixed use development. The site is 60 hectares and is situated 1.5 miles to the north west of Bolsover.

Emphasis on Advanced Manufacturing Start-Ups
Planned schemes comprise Start-up business work spaces including Pleasley Mills and Tangent Phase 2.

Key:
- Growth Area
- Key Highway
- Rail Line
- Black Text: Proposed SCRIP Interventions

GROWTH AREA

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<thead>
<tr>
<th>GROWTH AREA</th>
<th>TOTAL EMPLOYMENT</th>
<th>TOTAL HOUSING</th>
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</thead>
<tbody>
<tr>
<td>Markham Vale</td>
<td>666</td>
<td>54%</td>
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</table>

Key Growth Sectors: Logistics and Transport, Construction, Low Carbon, Medium-Low Technology, Manufacturing and Other.
**DSA Corridor & Doncaster**

"This and surrounding areas to be recognised as a catalyst for business development, inward investment and job creation with regard to logistics, engineering and associated aviation activities."

**Lakeside Infrastructure Institutions**
Application submitted for the National College for High Speed Rail at Doncaster Lakeside. This will capitalise on locational advantages from being in close proximity to DB Schenker, Volker Rail and Hitachi. Doncaster is also set to become the base for the National Institute for Infrastructure.

**DSA8: Doncaster Flood Risk**
Large areas of Doncaster are at risk from flooding. Opportunities to integrate flood risk mitigation with green and blue infrastructure should be explored, with an objective of enhancing place-making.

**DSA4: A630 & A6182**
The A630 Rotherham to Doncaster corridor is identified as a corridor where bus journey times are worsening. Along with the A6182 corridor, it is forecast to experience increased travel time delay if mitigation measures are not implemented.

**DSA2: A1/M18 Junction**
The A1(M) from M18 Doncaster to Darrington in Wakefield is considered to be a significant area of constraint, with extensive congestion and safety concerns. Implementation of strategic interventions on this route could increase productivity and the vitality of local centres.

**DSA7: Greener Growth & Low Carbon Development**
Identify and bring forward opportunities for energy generation to support greener growth throughout DSA Corridor and Doncaster.

**DSA1: Doncaster Sheffield Airport Surface Access & Onsite Airside Infrastructure**
- DSA is identified as a growth area which is currently being developed as an engineering and aero-industry centre, alongside and including housing growth. DSA can benefit from further improvements to surface access, in the form of:
  - Improved bus services including express services to Sheffield and Doncaster centres.
  - Better rail connectivity through a future community rail station at Hayfield Lane and connectivity to ECML and HS2.

**DSA6: Urban Mobility**
Interventions could include place-based urban mobility solutions to improve local access, urban centres and transport nodes such as rail and bus interchanges.

**DSA5: Alleviate Capacity Constraints at Doncaster Rail Station**
The East Coast Mainline connects Doncaster to London and the north. However there are capacity constraints at Doncaster where services from Humberside are required to cross the ECML, which does limit the capacity of the ECML. In addition, the ECML displays high levels of passenger overcrowding, which is likely to increase. Planned improvements will contribute to unlocking greater access to labour markets.

**DSA3: iPort Rossington Rail Freight Growth**
Doncaster - Lincoln Line or East Coast Mainline and would help unlock European labour markets.

**DSA1: Doncaster Sheffield Airport**

**Key:**
- Growth Area
- Key Highway
- Rail Line
- Potential Future Rail Station
- Urban Mobility Zone

**Black Text:** Proposed SCRIIP Interventions

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<tr>
<td>Doncaster</td>
<td>11,906</td>
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<tr>
<td>DSA</td>
<td>8,528</td>
<td>88%</td>
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<tr>
<td>Growth Sectors: Construction, Other, Tourism Leisure and Sport, Medium Low Technology Manufacturing</td>
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© Arup
Sheffield City Centre

“As the City Region’s hub for Knowledge, Creative and Digital Industries, Leisure, Higher Education, Culture and Financial and Professional Services Sectors, Sheffield City Centre is a key engine for growth.”

Implementation of Sheffield Lower Don Valley Flood Alleviation Scheme
1,200 homes and 1,000 businesses were flooded in 2007 alone. Early work has begun to progress on the Sheffield Lower Don Valley Flood Protection Scheme. This will result in alleviated standard of protection to 570 homes, strategic infrastructure and utilities and commercial properties.

S1: Broadband Coverage
Sheffield City Centre suffers from poor superfast broadband coverage. There is scope to encourage investment through demand stimulation, along with attracting investment to provide a city centre wide ultrafast broadband network.

S7: Infrastructure to Support Sheffield Retail Quarter
Proposals are focused on Barkers Pool, Pinstone Street and Moorhead and will result in the delivery of:
- Extended shopping area;
- New office and public spaces;
- New restaurants and cafes.

S4: Alleviating Strategic Flood Risk & Strategic Infrastructure
Large areas of Sheffield City Centre are at risk from fluvial flood risk and many city centre watercourses have been historically culverted and removed from the landscape. Opening up and re-naturalising these watercourses, as has already been successfully delivered at Matilda Street, alongside integration of flood alleviation schemes, SUDs and water management schemes within Local Centres could present opportunities to realise the regeneration benefits of blue and green infrastructure.

S10: Upper Don FAS
The Upper Don Flood Alleviation Scheme presents a key opportunity upstream of the centre to improve the flood resilience of Sheffield City Centre by mitigating flood risk.

S11: Remodelling of Sheffield Station
This is necessary to provide greater capacity and frequency of services at Sheffield Station.

S2: Rail Connectivity & Benefits of HS2
Provide a package of transport connectivity improvements to connect Central Business District to the future HS2 station and improve connectivity between the HS2 station and the wider Sheffield City Region.

S12: Inner Ring Road
The ability of the Inner Ring Road to receive traffic from radial routes is a fundamental capacity constraint in respect of the radial delay corridors.

S5: Greener & Low Carbon Growth
Identify and bring forward opportunities for energy generation to support greener growth within Sheffield City Centre.

S6: Waste Management
As a capacity gap has been identified encourage further changes in waste behaviours to minimise growth in waste levels and further consider where a “closed loop economy” could be achieved, for example, through expansion of energy generation from waste.

S8: Electricity Capacity Shortfalls at 11kV Level
There are a number of shortfalls at the 11kv network level. There may be some investment needed in the electricity distribution network to deliver the City Centre Masterplan.

S1: West End Transport Masterplan
Sheffield City Council proposal to introduce a new westbound tram route to alleviate congestion and limiting conflicts on the Inner Ring Road.

S9: West End Transport Masterplan
Sheffield City Council proposal to introduce a new westbound tram route to alleviate congestion and limiting conflicts on the Inner Ring Road.

GROWTH AREA | TOTAL EMPLOYMENT | TOTAL HOUSING
--- | --- | ---
Sheffield City Centre | Increase 20,503 42% | Increase 12,469 167% | Contribution 29.3% | Contribution 17.8%

Growth Area: Retail, Financial and Professional Services, Creative and Digital Industries, Tourism, Leisure and Sport.
“A town developing a diverse economic base, with a number of key visitor attractions such as Clumber Park and Sherwood Forest.”

SCR Transport Strategy 2011 - 2026

W1: Urban Mobility

Identify opportunities to increase urban mobility in Worksop, including access to rail stations on the Worksop Line and employment in the town centre. Expanded Park & Ride provision in these locations could alleviate increased congestion on the highway network and support rail patronage to grow demand for further improvements to rail connectivity.

W2: Need for Waste Facilities

Nottinghamshire and Nottingham Waste Core Strategy identifies Worksop for a smaller / medium sized waste treatment facility.

W3: Flood Risk in Worksop

There is an area of flood risk surrounding the River Ryton which impacts the local centre. Interventions could include additional defences or surface water management.

Key:

<table>
<thead>
<tr>
<th>Rail Line</th>
<th>Urban Mobility Zone</th>
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Black Text: Proposed SCRIIP Interventions

Improvements to rail connectivity

Worksop will benefit from a half hourly service through the new Northern Rail Franchise.

Improvements to rail connectivity

GROWTH AREA

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<thead>
<tr>
<th>WORKSOP</th>
<th>TOTAL EMPLOYMENT</th>
<th>TOTAL HOUSING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Increase</td>
<td>% change (2014 – 2024)</td>
</tr>
<tr>
<td>WORKSOP</td>
<td>1,201</td>
<td>7%</td>
</tr>
</tbody>
</table>

Growth Sectors: Logistics and Transport, Health, Retail, Business Services and Financial and Professional Services
"A town benefitting from a strategic location on the national railway network and strong economic links to Nottingham, Newark and Lincoln."

Nottinghamshire and Nottingham Waste Core Strategy identifies Retford for a small / medium sized waste treatment facility.

Chancery Lane area and Retford Station (Sheffield - Lincoln line) particularly susceptible to flooding. Intervention could include defences or water management schemes.

New Northern Rail Franchise
Planned improvements will result in (as a minimum):
- Two trains per hour (Monday - Saturday) between Sheffield, Worksop and Retford by 2017.
- Replacement of Pacer trains by 2020.

Flood and Coastal Risk Management Programme identified development project, which could raise the standard of protection to 110 households.

Retail, Tourism Leisure and Sport, Health, Creative and Digital Industries and Financial and Professional Services.

GROWTH AREA TOTAL EMPLOYMENT TOTAL HOUSING

<table>
<thead>
<tr>
<th>Growth Area</th>
<th>Increase</th>
<th>% change (2014 - 2024)</th>
<th>Contribution to SEP (total of 70,000)</th>
<th>Increase</th>
<th>% change (2014 - 2024)</th>
<th>Contribution to SEP (total of 70,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retford</td>
<td>524</td>
<td>0%</td>
<td>0.7%</td>
<td>1,537</td>
<td>15%</td>
<td>2.2%</td>
</tr>
</tbody>
</table>

Matlock

“Largest town in the Derbyshire Dales and key employment centre with significant mixed use redevelopment opportunities to support growth and increase demand for town centre services.”

M3: Urban Mobility
Place-based urban mobility solutions to improve access to the strategic transport network, urban centres and transport nodes such as rail and bus interchanges.

M2: Improve Bus Service Between Sheffield & Matlock
Explore opportunities to improve connectivity between Matlock and Sheffield, including increased frequency of bus services.

M1: A615 Flood Risk
Explore economic case for defending the A61 and approximately 50 properties at risk from flooding within Matlock.

M4: Cawdor Quarry & Halldale Quarry
Infrastructure to support these key development sites which between them can offer 650 homes and 80,000 sq ft employment space.

M5: Wastewater Treatment Capacity
Increase in waste water treatment capacity required to facilitate growth in employment and housing in Matlock.

Supporting Infrastructure

<table>
<thead>
<tr>
<th>GROWTH AREA</th>
<th>TOTAL EMPLOYMENT</th>
<th>TOTAL HOUSING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Increase</td>
<td>% change (2014 - 2024)</td>
</tr>
<tr>
<td>Matlock</td>
<td>1,012</td>
<td>13%</td>
</tr>
</tbody>
</table>

Growth Sectors: Retail, Creative and Digital Industries, Construction, Health and Other.
1. A616 Manchester / M1 / SCR Corridor
2. A619 Chesterfield / Worksop Corridor
3. A617 Chesterfield / Mansfield Corridor
4. A6182 Doncaster / M18 (Junction 3) Corridor
5. A61 Penistone / Sheffield Corridor
6. A628 Barnsley / Penistone Corridor
7. A635 Barnsley / Doncaster Corridor
8. A630 Doncaster / A1(M) (Junction 36) Corridor
9. A635 Barnsley / A637 / M1 (Junction 38) Corridor
10. A61 Chesterfield / Sheffield Corridor
11. A57 Peak District / Manchester / Sheffield Corridor
12. A61 Sheffield City Centre St Mary’s Way to Penistone Road
13. A61 Sheffield City Centre Shalesmoor to Shoreham Street
14. A6135 Sheffield / M1 (Junction 36) Corridor
15. A633 Rotherham / Dearne Valley Corridor
16. M1 (Junction 34 - 34)
17. A6102 Sheffield / Stocksbridge Corridor
18. A57 & A630 Sheffield / Rotherham / M1 (Junction 33) Corridor
19. A6178 M1 (Junction 34) / Sheffield Corridor
20. A637 / M1 (Junction 38) / Barnsley Corridor

Key:
- Highway corridor forecast to experience increased delay
- Local Centres
- Growth Areas

© Arup
3 Delivering Key Infrastructure Priorities

3.1 Commissioning Approach

What is a Commissioning Approach?

The commissioning approach has been developed to create an up-front mechanism to ensure proposals are brought forward in a coordinated manner and consider integrating individual schemes as part of an overall investment. For the commissioning approach to be successful, it is essential that proposals are fairly and transparently evaluated to both ensure best value for money, but also to recognise and value the proposals which can make a demonstrable difference towards achieving the SEP objectives.

The emphasis of this Integrated Infrastructure Plan is on the agglomeration benefits that can be achieved by investing across the infrastructure spectrum in Growth Areas and investing in projects that will deliver demonstrable change and delivery of the SCR’s economic objectives.

The Commissioning Approach will not be a mechanism for evaluating and funding individual schemes. Instead it will evaluate integrated packages of infrastructure interventions, defined through a framework approach. Through these frameworks infrastructure will be delivered which can create conditions for growth and support the Growth Areas, Urban Centres, the SCR’s housing sites and strategic transport network. It is deliberately not prescriptive, allowing promoters the freedom to identify other opportunities in addition to those contained in this Plan that will support the SCR’s economic growth.

In terms of evaluating interventions, whilst value for money is an important consideration, the approach to commissioning will also be capable of including other success measures.

SCR has adopted an evolving approach to evaluating schemes for investment though its pioneer SCRIF approach. A Single Assessment Framework (SAF) has been developed which evaluates proposals to determine the overall impact of investment. Impact is measured by contribution to the net GVA of SCR per £ spend from SCRIF, but secondary objectives to ensure that social and geographical priorities are achieved (with minimal impact on GVA) are now also considered.

3.2 Relating the Commissioning Approach to the Funding Approach

An overarching approach for the allocation of both grant-based capital funding and the revolving funds will ensure that all potentially available funds are used in a complementary way to support and grow the City Region economy and provide clarity to investors.

This approach is rooted in the concept of a ‘fund of funds’ and it will be the role of SCR to align funding to the most beneficial investments. This continues to develop the initial design of the fund of funds included in the City Deal. The premise is that scheme promoters respond to the commission with the package of investments that best meet the objective of economic growth and SCR finds the most appropriate way to fund the scheme using the range of funding instruments available.

To address both the short term blockages and medium to long term delivery two broad types of fund will be employed; a Capital Fund and a revolving Urban Development Fund. Applications for funding should be supported by private sector investment and it should be clear that there is no alternative (more appropriate) funding source to progress the intervention.
- The Capital Fund will comprise the Local Growth Funds, funding secured through Devolution Agreements and any other aligned capital funds including those that may be established using some of the mechanisms identified in Section 5 of this Plan.

- The Urban Development Fund will make use of the existing JESSICA structures and be a revolving fund underpinned by an agreed Investment Strategy (established using capital funding). This funding instrument is intended for unlocking stalled schemes, and is not intended to make unviable schemes viable. SCR will retain flexibility in the application of this type of fund to maximise economic benefit. It is expected that applications will be supported by private sector investment and be in-line with the SCR Urban Development Fund Investment Strategy.

3.3 Process for Commissioning Interventions

The SCR IIP sets out the high level principles of how we will commission the future infrastructure pipeline. The detail of prioritisation will subsequently be developed with partners. Developing an investment pipeline is a complex process and the SCR IIP will set the strategic context upon which to develop the pipeline.

Applications for funding would be invited, through multiple calls, and should be coordinated and led by a Lead Promoter, supported by key stakeholders working together collaboratively to bring forward integrated packages of infrastructure interventions. This is to ensure that all potential interventions are captured and all partners coordinated. Calls will be open to promoters from the private and public sector, however, initially SCR will be seeking to invest in schemes that have a Local Authority partner.

The process builds on the existing SCR Assurance and Accountability Framework, with the commissioning stage providing the entry point to the programme. The purpose of this approach is to provide a framework from which an increasingly integrated approach can be taken. The first stage of this approach is to develop a package of schemes which together can overcome identified challenges and maximise benefits. The system remains flexible to deal with individual schemes, but the selection criteria will favour more integrated packages of investment.

The key stages of the commissioning approach will be as follows:

<table>
<thead>
<tr>
<th>Stage</th>
<th>Promoter Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) Expression of Interest (EOI)</td>
<td>Complete EOI Template</td>
</tr>
<tr>
<td>ii) Initial Sifting</td>
<td>Present package to Board</td>
</tr>
<tr>
<td>iii) Prioritisation &amp; Programme Entry (Testing Tool)</td>
<td>Complete Project Mandate Testing Tool data input template</td>
</tr>
<tr>
<td>iv) Business Case Development</td>
<td></td>
</tr>
<tr>
<td>a. Outline Business Case</td>
<td>Complete OBC Template (Quarterly Returns)</td>
</tr>
<tr>
<td>b. Full Business Case</td>
<td>Complete FBC Template (Quarterly Returns)</td>
</tr>
<tr>
<td>c. Funding Agreement</td>
<td>Complete Funding Agreement (Quarterly Returns)</td>
</tr>
<tr>
<td>v) Delivery</td>
<td>Complete Claim Returns (Quarterly Returns)</td>
</tr>
<tr>
<td>vi) Outcomes Evaluation &amp; Monitoring</td>
<td>Undertake Evaluation</td>
</tr>
</tbody>
</table>

Table 2: Commissioning Approach Stages
3.4 Criteria for Evaluating Interventions

Building on the pioneering work of SCRIF and the Single Assessment Framework, the commissioning approach for this Plan will consider value for money and additional social and environmental benefits. The evaluation criteria will remain flexible to the needs of the Combined Authority but will have a number of constant themes running for all commission rounds.

1. Prioritisation and evaluation will be based on the Green Book five cases approach and will therefore consider:
   a. Strategic Case: the problem the project will solve and its fit to local and national objectives.
   a. Economic Case: the value of benefits the project will deliver with particular emphasis on delivering the outcomes required to deliver the SCR SEP objectives.
   a. Commercial Case: the demand justification and evidence that once completed the project will achieve the outcomes identified.
   a. Financial Case: the overall financial position including the certainty of scheme costs and other sources of funding sought and secured.
   a. Management Case/ Delivery Case: the overall deliverability of the project and outcomes including governance structure, programmes, statutory processes and the approach to state aid.

2. Within these cases, SCR will be looking for: Value for Money and Economic Impact.

3. Delivery of interventions in the Growth Areas, Urban Centres and on the strategic transport network. Though other areas will be considered where strong benefits can be demonstrated.

4. Ability to leverage private sector investment and / or assets.

5. For applications to the capital fund - the ability for interventions to have started and be making a contribution towards SEP objectives within 5 years (e.g. construction jobs, use of local supply chains).

6. For recyclable funds - the ability of funds to be recovered within an appropriate timescale.

7. Clear demonstration of additionality.

The Infrastructure Executive Board (IEB) will retain flexibility to focus any individual commission on specific needs as they arise. For example, if in the view of the IEB investment in commercial property was highlighted as an urgent priority, then the Board could include further evaluation criteria that would bias investment that includes this type of intervention.
3.5 Commissioning Stage

This page sets out the stages of the commissioning approach, with the following pages describing this process in detail. This section should be used by the potential package leads and scheme promoters to understand the requirements at each stage. Further information on the stages after programme entry can be found in the SCR Assurance and Accountability Framework at http://sheffieldcityregion.org.uk/scr-integrated-infrastructure-plan/

Lead Promoter coordinates the development of an integrated package of investment that meets the requirements of this plan and draws in a range of projects and public and private sector partners.

Submission to SCRCA by Lead Promoter and stakeholders. A template has been developed by SCR to gather scheme information and help ensure clarity in the information required.

Initial prioritisation to identify those schemes that are most likely to deliver the objectives of this Plan. Evidence will be presented to the Infrastructure Executive Board for consideration.

Testing of the prioritised scheme using a mixture of quantitative and qualitative evidence. This will be aligned to the funding model to agree a fully funded programme.

Each scheme within a package will be considered on its own merits. The business case will set out how each scheme is part of a wider investment. The assessment will follow the existing Assurance Framework.

SCR to develop funding scenarios to inform programme decision

Figure 20: Commissioning Process
3.6 Scheme Development

The first stage of the process begins with scheme promoters who are seeking investment from the SCR Combined Authority. The SCR IIP has been developed to engender a substantially more integrated approach to the way in which schemes are developed and brought forward. The expectation of the Infrastructure Executive Board is that schemes will be integrated in the following ways:

- A package of investment focused on identified challenges or opportunities with a number of discrete projects.
- A partnership between public and private sector, including regulated bodies.
- A funding approach that can demonstrate how SCR investment is leveraging in other funding. Promoters will be expected to explore other funding opportunities before approaching SCR, recognising that some infrastructure sectors have significant funding channels available.

Outlined later in this document are the proposed packages of investment that need further development by Lead Promoters and their stakeholders. This is split into two types of package – by spatial priority areas and by network challenges. The commissioning approach will ask SCR partners to further develop these packages into propositions for further consideration. This will require input from the public and private sector and regulated bodies to ensure the approach is integrated.

The SCR is not mandating an approach to how the packages are developed from the initial descriptions and underpinning schemes described below. In developing the proposition, the Lead Promoter is advised to consider the information that will need to be provided in the subsequent stages.

The approach provides flexibility for individual schemes to be developed and come forward outside of the packages described later in this document.

3.7 Expression of Interest

The opportunity to express interest in securing funding from SCR Combined Authority will be open to all types of organisations. However, initially, SCR will be seeking to invest in schemes which have a Local Authority partner. Whilst traditionally the focus has been on investment in public sector assets, SCR has developed the approach to include wider investment as this will be critical to our success.

SCR has produced an EoI template for Lead Scheme promoters to complete (this can be found by following this link http://sheffieldcityregion.org.uk/scr-integrated-infrastructure-plan/).

The call for Expressions of Interest will be made by the Infrastructure Executive Board of the Combined Authority on an annual basis. This call will be through a time-limited window to allow the Board to consider a number of opportunities alongside one another. The Board will retain the flexibility to hold additional calls to meet a specific need as required.
3.8 Initial Sifting

SCR will undertake an independent assessment of the Expression of Interest documents submitted. This assessment will be used to sift the proposals to identify priority groupings. These groupings will provide the Infrastructure Executive Board with advice on which schemes should be progressed to the next stage. The evaluation criteria will focus on identifying opportunities that demonstrate:

a. Compliance with the five cases.

b. Alignment with the objectives and interventions set out in the SCR IIP.

c. An overarching spatial framework approach that integrates across different sectors (this is the first action for each Infrastructure Package).

d. Bringing together private and public investment, along with that of regulatory bodies.

e. Consideration will be given to deliverability to provide flexibility in delivering the programme (a mixture of short and longer term investment will be needed).

3.9 Prioritisation and Programme Entry

At the prioritisation stage, schemes will be accepted onto the programme for further development.

SCR has previously developed a tool for quantifying the potential economic benefits of investment. The FLUTE (Forecasting the interaction of Land-Use, Transport and the Economy) model was developed as a cutting edge mechanism to inform investment decisions, with schemes measured on their net contribution to the SCR economy in terms of GVA per pound invested. SCR partners are currently reviewing the application of this model to provide a more comprehensive approach. While this is under development, it is anticipated that the quantification of economic benefit will remain a key factor in assessing the relative merits of competing investments.

The Lead Promoter will be required to further develop the evidence presented within the Expression of Interest template to provide key inputs that can be used to quantify the potential economic benefits. In addition, greater scrutiny of the desirability and private sector support will be undertaken. Where the Board deems appropriate, a scheme can be ‘called in’ by the Infrastructure Executive Board so that it can be further understood and key questions asked of the promoter.

3.10 Business Case Development

The appraisal process for business cases is already well developed by SCR and will continue to be used for the management of schemes identified to deliver this plan. The approach is set out in the Accountability and Assurance Framework at:

http://sheffieldcityregion.org.uk/scr-integrated-infrastructure-plan/

The associated templates and guidance for the business case process are held by the SCR Executive.

At the time of writing, SCR is considering how to make development funding available where this will advance programme delivery.
3.11 Commissioning of Infrastructure Interventions for Growth Areas & Urban Centres

The subsequent reference packages serve to indicate the strategic infrastructure schemes which should be commissioned through an integrated framework approach to each Growth Area and Urban Centre, cognisant of urban centre masterplans.

It is proposed that infrastructure interventions within Growth Areas and Urban Centres are integrated within a wider framework which articulates the approach to development and growth within these areas, at both a strategic and more localised level. This will:

- Provide a further level of detail that the development market and investors will need in order to understand the proposition, identify opportunities and gain the confidence to invest.
- Provide the basis for investment in strategic infrastructure, by demonstrating the nature of the growth that it will support.
- Ensure that infrastructure requirements and solutions are defined in an integrated (rather than sector specific) manner.
- Provide the basis for engagement and collaborative working with key stakeholders.

Whilst the nature of the framework can be determined by the Lead Promoter in collaboration with their Supporting Promoters, it is anticipated that this would take the form of one or more Supplementary Planning Documents, Planning Statements, Local Development Orders or Outline Planning Consents. In some instances, these may already exist and can be readily utilised, or augmented. This Infrastructure Plan is intended to support and encourage these frameworks, rather than replace them.

These are deliberately not prescriptive, and the identified promoters have the ability to define the preferred solution to overcome the challenge, or realise the opportunity.

Example interventions are generally large-scale and Growth Area or Urban Centre specific, however, this should not restrict future schemes which impact Growth Areas or Urban Centres but where the source of risk, constraint or opportunity lies external to the City Region.

Within the SCR IIP we have focused on our identified Growth Areas which are forecast to deliver the majority of the jobs, growth and homes within the SCR. However, in dynamic and evolving markets this plan must be agile to consider proposals outside of the Growth Areas and Urban Centres, and part of the next stages of the commissioning approach will be to agree the criteria and order of magnitude of impact to qualify sites outside of the scope of the Growth Areas and Urban Centres. This may include the quantum of benefits that can make a strategic impact on the economic outcomes or housing delivery.
### 3.12 Commissioning - Spatial Infrastructure Packages

#### 3.12.1 Infrastructure Package 1: A61 Corridor

<table>
<thead>
<tr>
<th>Overarching Framework</th>
<th>Lead Promoter</th>
<th>Supporting Promoters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree an overarching masterplan that defines the approach to development and growth and is consistent with the Local Plan</td>
<td>Chesterfield Borough Council</td>
<td>Developers, landowners and investors within the area</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Infrastructure Theme</th>
<th>Example Interventions</th>
<th>Lead Promoter</th>
<th>Supporting Promoters</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transport</strong></td>
<td><strong>A1</strong>: Reduce forecast delay impact on A61.</td>
<td>Chesterfield Borough Council</td>
<td>Developers and landowners along A61 route</td>
</tr>
<tr>
<td><strong>Energy</strong></td>
<td><strong>A2</strong>: Interventions to deliver Greener Growth.</td>
<td>Chesterfield Borough Council</td>
<td>Energy Providers</td>
</tr>
<tr>
<td><strong>Transport</strong></td>
<td><strong>A3</strong>: Reduce forecast delay impact on A619 and A617.</td>
<td>Chesterfield Borough Council</td>
<td>Derbyshire County Council, Bassetlaw District Council, Bolsover District Council</td>
</tr>
<tr>
<td><strong>Land and Commercial Property</strong></td>
<td><strong>A4</strong>: Infrastructure in Staveley Works area to support development and regenerate 150ha of industrial land.</td>
<td>Chesterfield Borough Council</td>
<td>Developer</td>
</tr>
<tr>
<td><strong>Transport</strong></td>
<td><strong>A5</strong>: Urban Mobility solutions to improve access to the strategic transport network.</td>
<td>Chesterfield Borough Council</td>
<td></td>
</tr>
<tr>
<td><strong>Flood Risk</strong></td>
<td><strong>A6</strong>: Alleviation of flood risk to Chesterfield Rail Station.</td>
<td>Chesterfield Borough Council</td>
<td>Network Rail Environment Agency</td>
</tr>
<tr>
<td><strong>Flood Risk</strong></td>
<td><strong>A7</strong>: Flood Alleviation Infrastructure within Chesterfield Area.</td>
<td>Chesterfield Borough Council</td>
<td>Property owners and occupiers Environment Agency</td>
</tr>
<tr>
<td><strong>Land and Commercial Property</strong></td>
<td><strong>A8</strong>: Infrastructure to support development of the Avenue and Avenue Flood Balancing Scheme.</td>
<td>Homes &amp; Communities Agency and NEDDC</td>
<td>Chesterfield Borough Council Developers Environmental Agency</td>
</tr>
<tr>
<td><strong>Land and Commercial Property</strong></td>
<td><strong>A9</strong>: Interventions to provide infrastructure for the Peak Resort site.</td>
<td>Chesterfield Borough Council</td>
<td>Developers</td>
</tr>
<tr>
<td><strong>Transport</strong></td>
<td><strong>A10</strong>: New transport link to support regeneration of the Staveley Works Area and relieve congestion on the A619 corridor and provide opportunity to enhance links to Markham Vale.</td>
<td>Chesterfield Borough Council</td>
<td></td>
</tr>
<tr>
<td><strong>Land and Commercial Property</strong></td>
<td><strong>A11</strong>: 200 acre mixed use development site at Egstow Park forming an urban extension to Clay Cross delivering new homes and serviced employment plots.</td>
<td>Chesterfield Borough Council</td>
<td>Developer</td>
</tr>
<tr>
<td><strong>Land and Commercial Property</strong></td>
<td><strong>A12</strong>: The Callywhite Lane Industrial Regeneration Project in Dronfield involves site assembly, reclamtion of 19 ha of land and road infrastructure providing 47,000 square meters of business units in Use Classes B1 / B2 / B8 and up to 1200 jobs.</td>
<td>Chesterfield Borough Council</td>
<td>Developer</td>
</tr>
</tbody>
</table>
### 3.12.2 Infrastructure Package 2: Dearne Valley, M1 and Junction 36

<table>
<thead>
<tr>
<th>Overarching Framework</th>
<th>Lead Promoter</th>
<th>Supporting Promoters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree an overarching masterplan that defines the approach to development and growth and is consistent with the Local Plan</td>
<td>BMBC</td>
<td>Developers, landowners and investors within the area</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Infrastructure Theme Focus</th>
<th>Example Interventions</th>
<th>Lead Promoter</th>
<th>Supporting Promoters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport</td>
<td><strong>DV1</strong>: Reduce forecast delay impact on A635 between Barnsley and Doncaster, potentially by providing BRT solution to also address gap in mass transit connection.</td>
<td>BMBC</td>
<td>Doncaster Metropolitan Borough Council</td>
</tr>
<tr>
<td>Energy</td>
<td><strong>DV2</strong>: Transform the Dearne Valley into one of the lowest carbon communities in the UK within 20 years.</td>
<td>BMBC</td>
<td>Energy Providers</td>
</tr>
<tr>
<td>Transport</td>
<td><strong>DV3</strong>: Interventions to relieve forecast delay impact on the A6135.</td>
<td>BMBC</td>
<td>Sheffield City Council</td>
</tr>
<tr>
<td>Flood Alleviation</td>
<td><strong>DV4</strong>: Interventions to reduce flood risk posed by the River Dearne Washlands area.</td>
<td>BMBC</td>
<td>Environment Agency</td>
</tr>
<tr>
<td>Transport</td>
<td><strong>DV5</strong>: Improve connectivity on the Deanne Valley rail corridor, including interventions to increase frequency of service and provision of Park &amp; Ride facilities.</td>
<td>BMBC</td>
<td>Network Rail Train North / Transport for the North Train Operating Companies</td>
</tr>
<tr>
<td>Land and Commercial Property</td>
<td><strong>DV6</strong>: Bring forward development to take advantage of growing logistics and distribution sectors.</td>
<td>BMBC</td>
<td>Developers</td>
</tr>
<tr>
<td>Flood Alleviation</td>
<td><strong>DV7</strong>: Consider interventions which could alleviate fluvial flooding that limits strategic access across M1.</td>
<td>BMBC</td>
<td>Environment Agency</td>
</tr>
<tr>
<td>Energy</td>
<td><strong>DV8</strong>: Assess opportunities for integrating infrastructure sectors, such as integrating the Timber Resource Recovery Centre with the town centre district heating network.</td>
<td>BMBC</td>
<td>Energy Consultant / Developer</td>
</tr>
<tr>
<td>Utilities</td>
<td><strong>DV9</strong>: Address power capacity shortfalls to unlock development along the M1 corridor.</td>
<td>BMBC</td>
<td>Statutory Undertaker / Independent Distribution Network Operator</td>
</tr>
<tr>
<td>Transport</td>
<td><strong>DV10</strong>: Interventions to public transport and provision of business support to improve attractiveness of development sites in Goldthorpe.</td>
<td>BMBC</td>
<td>SYPTN</td>
</tr>
<tr>
<td>Infrastructure Theme Focus</td>
<td>Example Interventions</td>
<td>Lead Promoter</td>
<td>Supporting Promoters</td>
</tr>
<tr>
<td>----------------------------</td>
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</tr>
<tr>
<td>Transport</td>
<td><strong>DV11:</strong> Provision of transport infrastructure to link area in with any new TransPennine route.</td>
<td>BMBC</td>
<td>Doncaster Metropolitan Borough Council Highways England and/or Network Rail</td>
</tr>
<tr>
<td>Transport</td>
<td><strong>DV12:</strong> Explore options for improvements to the Deane valley parkway to improve traffic flows and support growth proposals.</td>
<td>BMBC</td>
<td></td>
</tr>
<tr>
<td>Transport</td>
<td><strong>DV13:</strong> Improved public transport connections and support to improve the commercial viability of Gladman Park Enterprise Zone.</td>
<td>SYPTE</td>
<td>BMBC</td>
</tr>
<tr>
<td>Land and Commercial Property</td>
<td><strong>DV14:</strong> Infrastructure to support the development of Thurnscoe Business Park.</td>
<td>BMBC</td>
<td></td>
</tr>
</tbody>
</table>
### 3.12.3 Infrastructure Package 2.1: Barnsley Urban Centre & M1 Junction 37

<table>
<thead>
<tr>
<th>Overarching Framework</th>
<th>Lead Promoter</th>
<th>Supporting Promoters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree an overarching masterplan that defines the approach to development and growth and is consistent with the Local Plan</td>
<td>BMBC</td>
<td>Developers, landowners and investors within the area</td>
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</tbody>
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<table>
<thead>
<tr>
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<th>Example Interventions</th>
<th>Lead Promoter</th>
<th>Supporting Promoters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport</td>
<td>BN1: Interventions to relieve forecast delay impact on the A635 and A637.</td>
<td>BMBC</td>
<td></td>
</tr>
<tr>
<td>Transport</td>
<td>BN2: Encourage more efficient urban mobility through shifting modal share away from private car usage.</td>
<td>BMBC</td>
<td>SYPTA</td>
</tr>
<tr>
<td>Transport</td>
<td>BN3: Improve Hallam Line connectivity through increased capacity and quality of services and reduction in journey times.</td>
<td>BMBC</td>
<td>Network Rail, Rail North / Transport for the North Train Operating Companies</td>
</tr>
<tr>
<td>Transport</td>
<td>BN4: Infrastructure to support J37 Barnsley Urban Growth Area to deliver housing and employment growth alongside a new link road.</td>
<td>BMBC</td>
<td>Developers</td>
</tr>
<tr>
<td>Land and Commercial Property</td>
<td>BN5: Provide a package of public realm improvements to Barnsley Town Centre.</td>
<td>BMBC</td>
<td>Developers</td>
</tr>
<tr>
<td>Land and Commercial Property</td>
<td>BN6: Interventions to public transport and provision of business support to improve attractiveness of development sites at Capitol Park Enterprise Zone.</td>
<td>BMBC</td>
<td>SYPTA</td>
</tr>
<tr>
<td>Transport</td>
<td>BN7: Improve speed, frequency, reliability and quality of services on Penistone Line. Upgrade stations and provide new P&amp;R sites.</td>
<td>BMBC</td>
<td>Network Rail, Rail North / Transport for the North Train Operating Companies</td>
</tr>
<tr>
<td>Transport</td>
<td>BN8: Explore options to increase capacity on A628 Dodworth Road between Junction 37 and Barnsley Town Centre.</td>
<td>BMBC</td>
<td></td>
</tr>
</tbody>
</table>
### 3.12.4 Infrastructure Package 3: DN7

<table>
<thead>
<tr>
<th>Overarching Framework</th>
<th>Lead Promoter</th>
<th>Supporting Promoters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree an overarching masterplan that defines the approach to development and growth and is consistent with the Local Plan</td>
<td>DMBC</td>
<td>DMBC, Energy Providers and Developers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Infrastructure Theme Focus</th>
<th>Example Interventions</th>
<th>Lead Promoter</th>
<th>Supporting Promoters</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Energy</strong></td>
<td>DN1: Focus on Low Carbon Industry, by identifying key synergies and opportunities for between low carbon sectors in DN7 and increasing energy resilience across SCR.</td>
<td>DMBC</td>
<td>Energy Providers, Developers and Potential Occupants at DN7</td>
</tr>
<tr>
<td><strong>Flood Mitigation</strong></td>
<td>DN2: Mitigate flood risk within Growth Area through identification of site-based alleviation methods and directing development out of areas of flood risk.</td>
<td>DMBC</td>
<td>Environment Agency Developers</td>
</tr>
<tr>
<td><strong>Land and Commercial Property</strong></td>
<td>DN3: Infrastructure to support Unity Masterplan.</td>
<td>DMBC</td>
<td>Developers</td>
</tr>
<tr>
<td><strong>Utilities</strong></td>
<td>DN4: Ensuring utility network is in place to support ‘Power Park’.</td>
<td>DMBC</td>
<td>Statutory Undertakers</td>
</tr>
<tr>
<td><strong>Transport</strong></td>
<td>DN5: Explore connections to Ferrybridge and Drax multi-fuel storage and Humber renewable fuels terminal.</td>
<td>DMBC</td>
<td>Network Rail, Transport for the North Train Operating Companies, Power Station Operators</td>
</tr>
<tr>
<td><strong>Transport</strong></td>
<td>DN6: Implementation of infrastructure to support a Transport Hub.</td>
<td>DMBC</td>
<td>Network Rail, Rail North / Transport for the North Train Operating Companies, SYPTE</td>
</tr>
</tbody>
</table>
### 3.12.5 Infrastructure Package 4: Advanced Manufacturing Innovation District

<table>
<thead>
<tr>
<th>Overarching Framework</th>
<th>Lead Promoter</th>
<th>Supporting Promoters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree an overarching masterplan that defines the approach to development and growth and is consistent with the Local Plan</td>
<td>SCC</td>
<td>RMBC, landowners and developers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Infrastructure Theme Focus</th>
<th>Example Interventions</th>
<th>Lead Promoter</th>
<th>Supporting Promoters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land and Commercial Property</td>
<td>SR1: Infrastructure to support expansion of Advanced Manufacturing Innovation District and enhance connections between Advanced Manufacturing Park, Sheffield Business Park and future development sites including those within Enterprise Zone.</td>
<td>SCC</td>
<td>RMBC, landowners and developers</td>
</tr>
<tr>
<td></td>
<td>SR2: Infrastructure to improve access to Waverley Mixed-Use Development.</td>
<td>Developer</td>
<td>RMBC</td>
</tr>
<tr>
<td>Transport</td>
<td>SR3: Reduce forecast delay impact on the A630 and A6178. There is potential for a BRT or light rail solution to achieve this.</td>
<td>Network Rail</td>
<td>RMBC Developers SYPTPE</td>
</tr>
<tr>
<td>Flood Alleviation</td>
<td>SR4: Interventions to alleviate flood risk in the Lower Don Valley and Rotherham town centre.</td>
<td>SCC</td>
<td>RMBC, Environment Agency, businesses &amp; landowners</td>
</tr>
<tr>
<td>Transport</td>
<td>SR5: Multi-modal Access to Waverley/ AMP/ Advanced Manufacturing Innovation District.</td>
<td>SCC</td>
<td>RMBC, Developers, SYPTPE</td>
</tr>
<tr>
<td>Energy</td>
<td>SR6: Greener Growth: Intervention comprises identification and bringing forward of opportunities for energy generation and supporting a low carbon energy ecosystem.</td>
<td>SCC and Developers</td>
<td>Energy Providers and component suppliers</td>
</tr>
<tr>
<td>Waste Management</td>
<td>SR7: Encourage further changes in waste behaviours to minimise growth in waste levels and further consider where a ‘closed loop economy’ could be achieved.</td>
<td>Waste Management Company</td>
<td>SCC, Residents and Businesses</td>
</tr>
<tr>
<td>Land and Commercial Property</td>
<td>SR8: Provision of a package of financial, planning and business support incentives to encourage investment in Templeborough.</td>
<td>RMBC</td>
<td>RMBC and Developers</td>
</tr>
<tr>
<td>Land and Commercial Property</td>
<td>SR9: Infrastructure to support the success of the Olympic Legacy Park and delivery of education, research and community facilities.</td>
<td>SCC</td>
<td>Developers</td>
</tr>
<tr>
<td>Transport</td>
<td>SR10: Interventions to relieve forecast delay impact at M1 J34</td>
<td>Highways England</td>
<td>SCC, RMBC</td>
</tr>
</tbody>
</table>
### 3.12.6 Infrastructure Package 4.1: Rotherham Town Centre

<table>
<thead>
<tr>
<th>Overarching Framework</th>
<th>Lead Promoter</th>
<th>Supporting Promoters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree an overarching masterplan that defines the approach to development and growth and is consistent with the Local Plan</td>
<td>SCC</td>
<td>RMBC, landowners and developers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Infrastructure Theme Focus</th>
<th>Example Interventions</th>
<th>Lead Promoter</th>
<th>Supporting Promoters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flood Alleviation</td>
<td><strong>SR4</strong>: Interventions to alleviate flood risk in the Lower Don Valley and Rotherham town centre.</td>
<td>SCC</td>
<td>RMBC, Environment Agency, Businesses and Developers</td>
</tr>
<tr>
<td>Transport</td>
<td><strong>SR11</strong>: Interventions to relieve forecast delay impact on the A633 between Rotherham and the Dearne Valley.</td>
<td>RMBC</td>
<td>BMBC and Developers</td>
</tr>
<tr>
<td>Transport</td>
<td><strong>SR12</strong>: Improving connections such as public transport and cycle links in the Advanced Manufacturing Innovation District between Rotherham and Sheffield.</td>
<td>RMBC</td>
<td>SCC and Developers</td>
</tr>
<tr>
<td>Transport</td>
<td><strong>SR13</strong>: Creation of a new heavy rail station to provide access to mainline rail services to key regional destinations.</td>
<td>RMBC</td>
<td>Network Rail</td>
</tr>
<tr>
<td>Land and Commercial Property</td>
<td><strong>SR14</strong>: Implementation of the Rotherham Town Centre Masterplan (SPD)</td>
<td>RMBC</td>
<td>Developers</td>
</tr>
<tr>
<td>Transport</td>
<td><strong>SR15</strong>: Interventions to relieve forecast delay impact on the A6178 through the Lower Don Valley.</td>
<td>RMBC</td>
<td>SCC and SYPTE</td>
</tr>
<tr>
<td>Transport</td>
<td><strong>SR16</strong>: An additional tram-train stop at Magna/Templeborough to improve access to employment opportunities and support economic growth.</td>
<td>RMBC</td>
<td>SYPTE, Network Rail, Tram Operator</td>
</tr>
</tbody>
</table>
### 3.12.7 Infrastructure Package 5: Markham Vale and Bolsover

<table>
<thead>
<tr>
<th>Overarching Framework</th>
<th>Lead Promoter</th>
<th>Supporting Promoters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree an overarching masterplan that defines the approach to development and growth and is consistent with the Local Plan</td>
<td>Bolsover District Council.</td>
<td>Derbyshire County Council</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Infrastructure Theme Focus</th>
<th>Example Interventions</th>
<th>Lead Promoter</th>
<th>Supporting Promoters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land and Commercial Property</td>
<td>MV1, MV2 and MV3: Delivery of employment land, of which some has Enterprise Zone Status.</td>
<td>Derbyshire County Council</td>
<td>Developers</td>
</tr>
<tr>
<td>Land and Commercial Property</td>
<td>MV4: Infrastructure to support regeneration of the former Coalite site.</td>
<td>Bolsover District Council</td>
<td>Developers</td>
</tr>
</tbody>
</table>
### 3.12.8 Infrastructure Package 6: Doncaster Sheffield Airport Corridor and Doncaster

<table>
<thead>
<tr>
<th>Overarching Framework</th>
<th>Lead Promoter</th>
<th>Supporting Promoters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree an overarching masterplan that defines the approach to development and growth and is consistent with the Local Plan</td>
<td>DMBC</td>
<td>DMBC, Statutory Providers and Developers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Infrastructure Theme Focus</th>
<th>Example Interventions</th>
<th>Lead Promoter</th>
<th>Supporting Promoters</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transport</strong></td>
<td><strong>DSA1</strong>: Doncaster Sheffield Airport Surface Access &amp; Onsite Airside Infrastructure improvements, which could comprise better bus services, a community rail station and increased air freight handling capability.</td>
<td>DMBC</td>
<td>Developers, Network Rail, Train Operating Companies, Bus Operators, SYPTTE</td>
</tr>
<tr>
<td><strong>Transport</strong></td>
<td><strong>DSA2</strong>: A1/M18 Junction improvements.</td>
<td>Highways England</td>
<td>DMBC</td>
</tr>
<tr>
<td><strong>Land and Commercial Property</strong></td>
<td><strong>DSA3</strong>: Continued investment in iPort Rossington, supporting growth in the logistics sector.</td>
<td>DMBC</td>
<td>Developers</td>
</tr>
<tr>
<td><strong>Transport</strong></td>
<td><strong>DSA4</strong>: Reduce forecast delay on the A630 and A6182.</td>
<td>DMBC</td>
<td></td>
</tr>
<tr>
<td><strong>Transport</strong></td>
<td><strong>DSA5</strong>: Alleviate capacity constraints at Doncaster Rail Station.</td>
<td>Network Rail</td>
<td>DMBC</td>
</tr>
<tr>
<td><strong>Energy</strong></td>
<td><strong>DSA6</strong>: Improve Urban Mobility, which could include interventions to improve local access and release capacity on the strategic transport network.</td>
<td>DMBC</td>
<td></td>
</tr>
<tr>
<td><strong>Energy</strong></td>
<td><strong>DSA7</strong>: Support Greener Growth and Low Carbon Development in Doncaster</td>
<td>DMBC</td>
<td>Energy Providers and component suppliers</td>
</tr>
<tr>
<td><strong>Flood Alleviation</strong></td>
<td><strong>DSA8</strong>: Doncaster Flood Risk interventions could include exploring opportunities for integration of blue and green infrastructure.</td>
<td>DMBC</td>
<td>Environment Agency</td>
</tr>
</tbody>
</table>
### 3.12.9 Infrastructure Package 7: Sheffield City Centre

<table>
<thead>
<tr>
<th>Overarching Framework</th>
<th>Lead Promoter</th>
<th>Supporting Promoters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree an overarching masterplan that defines the approach to development and growth and is consistent with the Local Plan</td>
<td>Sheffield City Council</td>
<td>Developers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Infrastructure Theme Focus</th>
<th>Example Interventions</th>
<th>Lead Promoter</th>
<th>Supporting Promoters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telecommunications and Broadband</td>
<td>S1: Encourage investment in superfast and ultrafast broadband through demand stimulation.</td>
<td>Sheffield City Council</td>
<td>Broadband Providers</td>
</tr>
<tr>
<td>Transport</td>
<td>S2: Provide a package of transport connectivity improvements to connect the SCR HS2 station to the wider region.</td>
<td>Sheffield City Council</td>
<td>Network Rail Train Operating Companies Tram Operator</td>
</tr>
<tr>
<td>Transport</td>
<td>S3: Provide an integrated package of highway improvements, tram extensions, and world-class pedestrian and cycling infrastructure around the city centre and its radials, with consideration given to Smart Mobility solutions.</td>
<td>Sheffield City Council</td>
<td>BMBC, RMBC, Chesterfield Borough Council</td>
</tr>
<tr>
<td>Flood Alleviation</td>
<td>S4: Alleviating Strategic Flood Risk within Sheffield City Centre by integrating flood alleviation schemes, SuDs and water management schemes.</td>
<td>Sheffield City Council</td>
<td>Environment Agency Developers, landowners and businesses</td>
</tr>
<tr>
<td>Energy</td>
<td>S5: Identify and bring forward opportunities for Greener and Low Carbon Growth.</td>
<td>Sheffield City Council</td>
<td>Energy Providers and component suppliers.</td>
</tr>
<tr>
<td>Waste Management</td>
<td>S6: Increase in waste management capability to meet projected shortfall in capacity, and move up waste hierarchy. Potential to integrate with energy, housing and property (heat generation).</td>
<td>Sheffield City Council</td>
<td>Waste Management Company</td>
</tr>
<tr>
<td>Land and Commercial Property</td>
<td>S7: Infrastructure to support Sheffield Retail Quarter.</td>
<td>Sheffield City Council</td>
<td>Developers</td>
</tr>
<tr>
<td>Utilities</td>
<td>S8: Investment in electricity distribution network in Sheffield city centre.</td>
<td>Sheffield City Council</td>
<td>Electricity Company Developers</td>
</tr>
<tr>
<td>Transport</td>
<td>S9: Implementation of West End Transport Masterplan.</td>
<td>Sheffield City Council</td>
<td>SYPTTE Tram Operator</td>
</tr>
<tr>
<td>Flood Alleviation</td>
<td>S10: The Upper Don Flood Alleviation Scheme to improve the flood resilience of Sheffield City Centre by mitigating flood risk.</td>
<td>Sheffield City Council</td>
<td>Environment Agency Businesses &amp; Landowners</td>
</tr>
<tr>
<td>Transport</td>
<td>S11: Interventions to remodel Sheffield Station to provide greater capacity and frequency of services.</td>
<td>Network Rail</td>
<td>Sheffield City Council</td>
</tr>
<tr>
<td>Transport</td>
<td>S12: Interventions to improve the Inner Ring Road as part of the Key Route Network.</td>
<td>Sheffield City Council</td>
<td>Businesses &amp; Developers</td>
</tr>
</tbody>
</table>
### 3.12.10 Infrastructure Package 8: Worksop

<table>
<thead>
<tr>
<th>Infrastructure Theme Focus</th>
<th>Example Interventions</th>
<th>Lead Promoter</th>
<th>Supporting Promoters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport</td>
<td>W1: Identify opportunities to increase urban mobility, including access to the Worksop Rail line and town centre.</td>
<td>Bassetlaw District Council</td>
<td>Nottinghamshire County Council</td>
</tr>
<tr>
<td>Waste Management</td>
<td>W2: Identify sites for a small-medium sized waste treatment facility.</td>
<td>Nottinghamshire County Council</td>
<td>Bassetlaw District Council</td>
</tr>
</tbody>
</table>

### 3.12.11 Infrastructure Package 9: Retford

<table>
<thead>
<tr>
<th>Infrastructure Theme Focus</th>
<th>Example Interventions</th>
<th>Lead Promoter</th>
<th>Supporting Promoters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flood Alleviation</td>
<td>RE1: Raise the standard of flood protection at Retford Beck, Grove Lane, Blackstope Lane.</td>
<td>Bassetlaw District Council</td>
<td>Environment Agency</td>
</tr>
<tr>
<td>Flood Alleviation</td>
<td>RE2: Chancery Lane Flood Alleviation and improving standard of protection.</td>
<td>Bassetlaw District Council</td>
<td>Environment Agency Network Rail</td>
</tr>
<tr>
<td>Waste Management</td>
<td>RE3: Identify sites for a small-medium sized waste treatment facility.</td>
<td>Nottinghamshire County Council</td>
<td>Bassetlaw District Council</td>
</tr>
<tr>
<td>Transport</td>
<td>RE4: Identify opportunities to increase urban mobility in Retford, including access to rail station and employment in the centre.</td>
<td>NCC and Bassetlaw District Council</td>
<td>Nottinghamshire County Council and Bassetlaw District Council</td>
</tr>
</tbody>
</table>
### 3.12.12 Infrastructure Package 10: Matlock

<table>
<thead>
<tr>
<th>Infrastructure Theme Focus</th>
<th>Example Interventions</th>
<th>Lead Promoter</th>
<th>Supporting Promoters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flood Alleviation</td>
<td><strong>M1</strong>: Explore economic case for defending the A615 and properties at risk in Matlock.</td>
<td>Derbyshire Dales District Council</td>
<td>Environment Agency</td>
</tr>
<tr>
<td>Transport</td>
<td><strong>M2</strong>: Explore opportunities to improve connectivity between Matlock and Sheffield, including increased frequency of bus services.</td>
<td>Derbyshire Dales District Council</td>
<td>Derbyshire Dales District Council</td>
</tr>
<tr>
<td>Transport</td>
<td><strong>M3</strong>: Identify opportunities to increase urban mobility in Matlock, including access to rail station and employment in the centre.</td>
<td>Derbyshire Dales District Council</td>
<td>Derbyshire Dales District Council</td>
</tr>
<tr>
<td>Land and Commercial Property</td>
<td><strong>M4</strong>: Infrastructure to support the development sites – Cawdor Quarry and Halldale Quarry.</td>
<td>Derbyshire Dales District Council</td>
<td>Developers</td>
</tr>
<tr>
<td>Waste Management</td>
<td><strong>M5</strong>: Increase in waste water treatment capacity to facilitate growth in employment and housing in Matlock.</td>
<td>Derbyshire Dales District Council</td>
<td>Sewerage Company</td>
</tr>
</tbody>
</table>
## 3.13 Network Priorities

### 3.13.1 Strategic Transport Network

<table>
<thead>
<tr>
<th>Local Authority Area</th>
<th>Junction Capacity Interventions</th>
<th>Corridor Interventions (Those Not Covered in Infrastructure Packages 1 – 10)</th>
<th>Lead Promoter</th>
<th>Supporting Promoters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barnsley</td>
<td>Yes</td>
<td></td>
<td>Barnsley Metropolitan Borough Council</td>
<td></td>
</tr>
<tr>
<td>Bassetlaw</td>
<td>Yes</td>
<td></td>
<td>Nottinghamshire County Council</td>
<td>Bassetlaw District Council</td>
</tr>
<tr>
<td>Bolsover</td>
<td>Yes</td>
<td></td>
<td>Nottinghamshire County Council</td>
<td>Bolsover District Council</td>
</tr>
<tr>
<td>Chesterfield</td>
<td>Yes</td>
<td></td>
<td>Derbyshire County Council</td>
<td>Chesterfield Borough Council</td>
</tr>
<tr>
<td>Derbyshire Dales</td>
<td>Yes</td>
<td></td>
<td>Derbyshire County Council</td>
<td>Derbyshire Dales District Council</td>
</tr>
<tr>
<td>Doncaster</td>
<td>Yes</td>
<td></td>
<td>Doncaster Metropolitan Borough Council</td>
<td></td>
</tr>
<tr>
<td>NE Derbyshire</td>
<td>Yes</td>
<td></td>
<td>Derbyshire County Council</td>
<td>NE Derbyshire District Council</td>
</tr>
<tr>
<td>Rotherham</td>
<td>Yes</td>
<td></td>
<td>Rotherham Metropolitan Borough Council</td>
<td></td>
</tr>
<tr>
<td>Sheffield</td>
<td>Yes</td>
<td>A616 Stocksbridge – M1 A6102 Sheffield - Stocksbridge</td>
<td>Sheffield City Council</td>
<td>Barnsley Metropolitan Borough Council</td>
</tr>
</tbody>
</table>

### 3.13.2 Other Network Interventions

Other schemes proposed in the Utilities, Telecoms, Waste and Energy sectors that fall out with the Infrastructure Packages listed above can be brought forward as standalone schemes for consideration by SCRCA through the EOI process. In some cases, it is anticipated that these would be guided by overarching strategies, such as that proposed for the Low Carbon Ecosystem.
4 Indicative Order of Magnitude Costs

Overview
In order to give a sense of scale of the proposed investment in strategic infrastructure across SCR over the period of this Plan, a high level ‘order of magnitude’ cost estimate has been derived through a benchmarking process.

This section presents a summary of the cost estimate, with further detail provided separately in Annex F - Infrastructure Costs Benchmarking.

Key Cost Assumptions
The following assumptions were applied in producing the cost estimates:

- Those interventions that are within SCR that would be delivered by SCR Partners, the private sector or regulated industries with regional operations (e.g. electricity, water) have been included and fall within the scope of the SCR ‘infrastructure bill.’ Ultimately, it has been assumed that the businesses and residents of SCR will need to fund this infrastructure development, or Government will need to provide grant funding to SCR Partners to permit their implementation.

- Those interventions that are within SCR, but would be delivered by national partners such as Highways England or Network Rail, have not been included, on the basis that these costs would be borne at a national level and funded through Central Government programmes.

- Those interventions that form part of broader national or pan-northern programmes, such as HS2 and Transport for the North, have not been included, as these schemes are assumed to be funded through Central Government programmes.

- The costs are generally deemed to include capital costs and professional fees, but exclude employer’s direct costs, land purchase costs, finance and legal costs and VAT. Revenue costs are included only as stated.

- Optimism bias has been included at 44% on capital expenditure based on standard civil engineering projects.

Limitations
The following limitations apply to the cost estimates:

- The solutions to the infrastructure challenges and opportunities are not yet defined (this being the task of the identified promoters), and therefore only high level costs can be provided, benchmarked against examples elsewhere.

- The high level nature of the costing means that costs for delivering individual schemes cannot be provided with accuracy. A degree of cost risk distribution can be achieved by looking at sectors and packages, as opposed to individual schemes.

- In some cases, the data is not available to support a well evidenced cost assumption, and therefore the assumption will remain highly indicative.
### Infrastructure Costs by Sector

Indicative infrastructure cost estimates by sector are provided in Table 3.

<table>
<thead>
<tr>
<th>Infrastructure Sector</th>
<th>Indicative Order of Magnitude Cost (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land &amp; Commercial Property</td>
<td>4,182m</td>
</tr>
<tr>
<td>Housing</td>
<td>11,361m</td>
</tr>
<tr>
<td>Flood Risk</td>
<td>207m</td>
</tr>
<tr>
<td>Utilities</td>
<td>113m</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>10m</td>
</tr>
<tr>
<td>Transport</td>
<td>1,587m</td>
</tr>
<tr>
<td>Waste</td>
<td>942m</td>
</tr>
<tr>
<td>Energy</td>
<td>1,236m</td>
</tr>
<tr>
<td><strong>SCR Value (£) Nett of Optimism Bias</strong></td>
<td><strong>19,638m</strong></td>
</tr>
<tr>
<td>Optimism Bias at 44%</td>
<td>8,641m</td>
</tr>
<tr>
<td><strong>SCR Value (£)</strong></td>
<td><strong>28,279m</strong></td>
</tr>
</tbody>
</table>

Table 3: Indicative Infrastructure Costs by Sector

### Infrastructure Costs by Package

Indicative costs for each infrastructure package are provided in Table 4.

<table>
<thead>
<tr>
<th>Infrastructure Sector</th>
<th>Indicative Order of Magnitude Cost (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP1: A61 Corridor &amp; Chesterfield</td>
<td>924m</td>
</tr>
<tr>
<td>IP2: Dearne Valley, M1 and Junction 36</td>
<td>1,488m</td>
</tr>
<tr>
<td>IP2.1: Barnsley Urban Centre and M1 Junction 37</td>
<td>141m</td>
</tr>
<tr>
<td>IP3: DN7</td>
<td>1,194m</td>
</tr>
<tr>
<td>IP4: Advanced Manufacturing Innovation District</td>
<td>1,186m</td>
</tr>
<tr>
<td>IP4.1: Rotherham Town Centre</td>
<td>107m</td>
</tr>
<tr>
<td>IP5: Markham Vale &amp; Bolsover</td>
<td>149m</td>
</tr>
<tr>
<td>IP6: RHADS Corridor &amp; Doncaster</td>
<td>1,780m</td>
</tr>
<tr>
<td>IP7: Sheffield City Centre</td>
<td>4,276m</td>
</tr>
<tr>
<td>IP8: Worksop</td>
<td>170m</td>
</tr>
<tr>
<td>IP9: Retford</td>
<td>208m</td>
</tr>
<tr>
<td>IP10: Matlock</td>
<td>241m</td>
</tr>
<tr>
<td><strong>SCR Package Value (£) Nett of Optimism Bias</strong></td>
<td><strong>11,864m</strong></td>
</tr>
<tr>
<td>Optimism Bias at 44%</td>
<td>5,220m</td>
</tr>
<tr>
<td><strong>SCR Package Value (£)</strong></td>
<td><strong>17,084m</strong></td>
</tr>
</tbody>
</table>

Table 4: Indicative Infrastructure Costs by Package
5  Funding Options

5.1  Introduction
A broad range of funding options have been considered that could support the delivery of infrastructure across SCR, see Annex E – Funding Options Report. These are based on traditional and more innovative approaches, and informed by examples from elsewhere in the UK. Working with SCR finance and economic development experts, these have been refined down to a shortlist of options.

5.2  Funding Context
Many of the traditional public funding sources, e.g. central government grants and council tax receipts, are currently stretched protecting front-line services. Added to which central government grants are inherently uncertain in terms of quantum and timing making it difficult to plan long-term over multiple finance settlement periods. Whilst there may be limited scope to free up surpluses within these sources, increasingly new sources will be required to provide additionality in resources which could enable investment without displacing core services.

Financing & Funding
The terms financing and funding are sometimes used interchangeably but there are subtle yet important differences:

- Financing – the financial arrangements put in place to provide committed capital to meet the costs of a project as they arise. This is usually required to meet the substantial upfront CapEx costs to build a project and can be in the form of debt (e.g. bank loans) or equity. The cost of financing (e.g. debt interest payments) will need to be met from funding sources.

- Funding – the sources of revenue for a project that will be used to satisfy the capital and revenue costs (both operating and financing costs) over time. It addresses the fundamental question of who pays for the asset in the end, i.e. who bears the ultimate burden of meeting the costs incurred. Who pays can usually be answered in terms of the taxpayer pays or the user pays.

Local authorities can reduce the financing requirement for a project, e.g. by contributing some existing or new capital grant allocations or by selling an asset to raise the capital. This may reduce – or eliminate – the financing requirement or it may leave a gap between sources and requirements.

Identifying ongoing revenue to support financing raised (as well as the operating and maintenance requirements of the asset) is more challenging, however, and is often the most difficult issue which prevents projects proceeding.

This Plan primarily focuses on different potential funding sources available to either the SCR or its member districts who could support SCR financing through partner contributions, or finance projects directly.
5.3 Methodology
This analysis has been undertaken through a desk-based review of relevant literature, coupled with Arup’s global experience of the implementation of different funding sources available to different cities. Based on the above, we have identified a broad list of potential funding mechanisms that may be applicable to the SCR or its member districts. For a full explanation of each funding source and the detailed discussion of the benefits and risks, as well as some of the implications of each tool, please see Annex E – Funding Options Report.

5.4 Funding Sources
The matrix below summarises the different funding sources discussed in greater detail in Annex E – Funding Options Report, categorised based on a qualitative judgment of the:
- Volatility of the funding source in terms of reliance when investing in new infrastructure projects (factors such as known baseline versus uncertain forecasts, within SCR/members district control or third party negotiations, cost to implement, etc.); and
- Quantum in terms of the level of funding required to deliver the infrastructure project.

The allocations are only indicative to provide context.

The majority of the funding sources set out are flexible with regards what infrastructure type they can applied to. Grant funding from EU and central government is often ring-fenced for specific purposes, although most central government grants are now provided without these stipulations and although provided for a specific purpose, can be used as local authorities determine most appropriate.

Many of the items set out are general tax raising measures and the proceeds can be directed to where local authorities deem most appropriate. These measures are only limited by the conditions set out in the statutory instruments bringing them into force, however some would require new national legislation or a local voluntary agreement, e.g. a hotel/tourist tax.

<table>
<thead>
<tr>
<th>Lower Quantum</th>
<th>Medium Quantum</th>
<th>Higher Quantum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher Volatility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Third party contributions</td>
<td>Community Infrastructure Levy</td>
<td>User fee / toll collection</td>
</tr>
<tr>
<td>Section 106</td>
<td>Crowd funding</td>
<td>Payment by results</td>
</tr>
<tr>
<td></td>
<td>Tax Incremental Financing</td>
<td>Repatriation of other national taxes</td>
</tr>
<tr>
<td></td>
<td>Revenue Generating Assets (trading)</td>
<td></td>
</tr>
<tr>
<td>Medium Volatility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EU grants</td>
<td>Revenue generating assets (charging)</td>
<td>Business rate supplement</td>
</tr>
<tr>
<td>Central Government LEP funding</td>
<td>Workplace parking levy</td>
<td>Council tax precept</td>
</tr>
<tr>
<td>Central Government grands</td>
<td></td>
<td>Special purpose local taxes</td>
</tr>
<tr>
<td>Lower Volatility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surplus asset sales</td>
<td>Council tax</td>
<td>Incremental: Limited local impact</td>
</tr>
<tr>
<td></td>
<td>Business rates</td>
<td>Incremental: local impact</td>
</tr>
</tbody>
</table>

*Core mechanism currently utilised by SCR LAs*  
*Incremental: Limited local impact*  
*Incremental: local impact*

Figure 21: Funding Sources Matrix
Case Study: Crossrail

Crossrail is a new fast, high frequency, high capacity railway from Reading, Maidenhead and Heathrow in the west, through central London to Shenfield and Abbey Wood in the east. Based on original cost estimates in 2007, central government announced a funding package of £15.9 billion. In June 2010, HM Treasury required the Department for Transport (DfT) to reduce its costs as part of the comprehensive spending review and the funding package was revised to £14.8 billion.

The expected contributions are:
- £4.8 billion (32%) direct from DfT;
- £1.9 billion (13%) direct from TfL (underpinned by future Crossrail users’ fare revenues);
- £5.8 billion (39%) from businesses; and
- £2.3 billion (16%) direct from Network Rail.

The responsibility for collection of contributions from businesses was split between both DfT (£0.48 billion) and TfL (£5.2 billion), with a further £0.1 billion to be raised by the City of London Corporation working with the Mayor of London and Government:

<table>
<thead>
<tr>
<th>Responsible Party</th>
<th>Funding Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department for Transport</td>
<td>£250m City of London Corporation</td>
</tr>
<tr>
<td></td>
<td>£230m Heathrow Airport Limited</td>
</tr>
<tr>
<td>Transport for London</td>
<td>£4.1 billion Business Rate Supplement</td>
</tr>
<tr>
<td></td>
<td>£300m Community Infrastructure Levy</td>
</tr>
<tr>
<td></td>
<td>£300m Section 106 planning obligations</td>
</tr>
<tr>
<td></td>
<td>£500m Surplus asset sales</td>
</tr>
<tr>
<td>Voluntary Funding</td>
<td>£100m Third party contributions</td>
</tr>
</tbody>
</table>

The Crossrail funding package highlights the often complex and necessary combination of funding sources needed to deliver a major infrastructure project, mixing both public and private sources.
5.5 Next Steps

Once a clear package of projects and programmes has been identified, an effective funding package can be put in place, and at this stage SCR will identify which sources might be appropriate given the project specifics.

As many of the funding sources identified above fall within the purview of local billing partners, the City Region will need to consider how it can best align costs that may fall locally, against benefit that may be felt regionally.

Equally, where local partners are asked to consider funding SCR infrastructure investment, it is likely that ‘one size fits all’ solutions (such as Council Tax precepts) may be unpalatable. Instead, the City Region may be able to consider funding calls on partners, but then afford those partners the flexibility to determine within their own individual circumstance how to meet that call. This could see some partners contributing revenue funding to support regional borrowing, or others contribute capital funding if that is more advantageous for them.

A key challenge in implementation will therefore be making the link between paying extra and the benefit to be derived. In addition, given there will ultimately be a limit to the capacity for each source of funding, SCR will need to prioritise which items of infrastructure should benefit from what is available.
6  A Successful Legacy

As with other major infrastructure programmes such as the London 2012 Olympics, the success of the Plan will be judged by its ability to achieve successful outcomes; and it is not just provision of the infrastructure in itself that will do this, but the conditions for growth that it creates. The strategic and flexible nature of this Plan ensures that it should be resilient, against a backdrop of future social, technological, economic, environmental and political change.

And our bespoke approach to commissioning has been designed to be outcome focused and aligned with the objectives set out in the Strategic Economic Plan, whilst at the same time allowing SCR the freedom to identify the solutions that work for us and our local areas, with a view to preparing for the future, not replicating the past.

Delivering this Plan would help to make SCR investment ready, enabling it to play a key part in creating the Northern Powerhouse, effectively respond to the newly established National Infrastructure Commission. With greater devolution over powers and funding secured in the 2015 SCR Devolution Deal, this Plan stands the City Region in good stead as it takes greater control over its future economic prosperity.

Achieving a successful legacy for the SCR can be promoted through the following:

- **Achieving Infrastructure Delivery:** Apply the Commissioning Approach to deliver a step change in infrastructure provision across SCR.

- **Maintaining and Strengthening Stakeholder Relationships:** Build on the relationships and connections generated through this Plan to establish working groups and collaboratively deliver strategic infrastructure packages.

- **Communicate the Plan Content and Progress:** Develop a plan to communicate progress in delivering this Plan at regular milestones, including through Infrastructure Summits and events to attract investment from both the UK and overseas.

- **Ensure the Longevity of the Infrastructure Delivery Group:** Broaden the remit and terms of reference of this group to not only guide infrastructure planning, but to include stakeholders who can support infrastructure delivery.

- **Regularly Review this Plan:** Refresh the Plan at regular intervals to take account of external factors and influences, and progress made in its delivery.

- **Align with the wider economic ecosystem:** Review and iterate this Plan to respond to those of the other work streams focused on delivering economic growth across SCR.

- **Achieve Closer Spatial Integration:** Over time, work together to more closely align land use planning with infrastructure investment, to achieve greater efficiencies and adapt to emerging trends and drivers.
Copies of the following annexes to this report are available upon request from the SCR Executive.

<table>
<thead>
<tr>
<th>Annex</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>FLUTE Modelling Report</td>
</tr>
<tr>
<td>B</td>
<td>Evidence Review &amp; Analysis</td>
</tr>
<tr>
<td>C</td>
<td>Analysis of Challenges &amp; Opportunities for Growth</td>
</tr>
<tr>
<td>D</td>
<td>Analysis of the SCR labour market’s capability to deliver the SCR Infrastructure ambition</td>
</tr>
<tr>
<td>E</td>
<td>Funding Options Report</td>
</tr>
<tr>
<td>F</td>
<td>Infrastructure Cost Benchmarking</td>
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